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ABSTRACT

The purpose of this 1949 book is to summarize the beliefs of the education division of the United States Indian Service and to present summarized statements of the educational objectives and teaching practices of Alaska and the 15 states where the Indian Service operates schools. Part I answers such questions as how public schools are changing; are all public schools good schools; and why Indian schools change rapidly. The educational approach, the primary objectives of Indian schools, the provisions for individual differences, and surveys as foundations for curriculum development are additional topics discussed in Part I. Part II reviews courses of study in Arizona, Colorado, Florida, Minnesota, Nebraska, Nevada, New Mexico, North Carolina, North Dakota, Oklahoma, Oregon, South Dakota, Texas, Utah, and Washington. The course of study for Alaska's elementary and secondary territorial schools is examined in Part III. (HBC)

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IN STEP WITH THE STATES

A Comparison of State and Indian Service Educational Objectives and Methods

Out of Print

by HOMER H. HOWARD

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(Retired)

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WHY THIS BOOK WAS WRITTEN

TWENTY YEARS AGO, when the Indian Service first began to demand that the curricula of its schools be planned locally in terms of local needs, this proposal involved a break with many state courses then in effect. The Education Division of the Indian Service, in touch with the best thinking of the time, pioneered in demanding an adaptable curriculum in rural schools. As these locally tailored programs were developed in school after school of the Indian Service, many state administrators publicly expressed the hope that their own public schools might eventually achieve a similar freedom. The day is now here when the courses of study of the states within which the Indian Service operates, recommend to their local schools the flexibility already achieved in the service.

Many of those who have been critical of the service are unaware of this change. Similarly, many conscientious teachers within the service, who have wholeheartedly believed in the living and flexible curricula which have been developed in the service schools, have been unaware of the progress which has taken place in state-wide thinking.

By many, a state course of study is thought of as something which is exact and inflexible, and which can be used to force uniformity upon all schools. Actually, few state courses of study adopted within the last fifteen years pretend to be any such thing. As will be discovered from the summaries contained in this book, the first warning found in most state courses today, is that "the curriculum should be built around needs of pupils which arise in their interaction with culture," or some similar statement inviting a free adaptation of the state syllabus to local needs.

To bring together the salient points in curriculum making as now understood within the several states, I asked Mr. Homer Howard, Supervisor of In-Service Training to summarize for us their current courses of study.

Many of these summaries have been printed from time to time in Indian Education. It seems worth while for our own guidance, and for the information of the Indian people and those who council with them, that these statements be brought together in a single volume. So here you have it—a summary of what the Indian Service has been standing for, educationally; and the summarized statements of what Alaska and 15 states within whose borders the Indian Service operates schools, claim as their educational objectives and teaching practices.

The title of this volume is at once its conclusion. The Indian Service educational objectives and its teaching methods are **In Step with the States.** To the extent that curriculum making has been deliberately decentralized, we are following the best advice that state departments are giving their own local schools. To the extent that we believe that more is learned from doing than from listening to some one talk or by reading from a book, divorced from activity, we are advocating an *activity type of teaching* which finds acceptance in all of the states. To the extent that we advocate learning to speak and think in English before trying to read—we are in step with what is recommended by every state which faces the problem of bilingual education.

When critics then state that Indian pupils in public schools—following the state course of study—are superior to Indian pupils in federal schools following the same basic course of study in academic achievement, it is fair to ask that they go one step further, and define *Indian pupils.* In the recently published monograph, **How Well are Indian Children Educated,** by Shailer Peterson, which reports on a three year testing program involving Indian pupils in federal, mission and public schools, Dr. Peterson answers this question. He tells us that the average Indian pupil in the public schools is a mixed blood, coming from a home equal to those of the whites in the area, in which one or more adults are whites familiar with white culture patterns, in which the English language is spoken, and where books, magazines and newspapers are found. The average Indian pupil in the federal day school is a full-blood coming from a primitive Indian home lacking modern conveniences, in which only an Indian language is spoken, no aspects of white culture are present, and no books, magazines or newspapers are likely to be found. Most of the parents of Indian children attending public schools have had considerable education themselves—and their parents before them, frequently. Many Indian day school pupils are the first members of their families to attend school—or come from parents with only limited schooling. Lastly, Dr. Peterson tells us that 49% of the full-bloods attending federal schools (and 73% of the 4th graders are full blood) remain in school to graduate from high school; whereas only 36% of the public school full bloods (and only 25% of the public school fourth grade Indian children are fullblood) stick it out till high school graduation.

The Minimum Essential Goals for Indian schools, will be found to assemble the subject matter objectives of the public schools; the enrichment of Indian school teaching will be drawn from the state courses of study found in each classroom. The books used in Indian schools are approved by state curriculum specialists and recommended for use in public schools.

Lastly, it should be stated that all federal Indian elementary schools are accredited—and all federal Indian high schools are accredited, by the states within which they operate. Accreditation, of course, simply means that the curricula of the schools, the physical equipment of the school plants, and the teachers employed meet the quality standards of the state departments of education. In many states, the college diploma with professional work in education required by Federal Civil Service, exceeds the requirements for teaching in elementary rural public schools.

The professional standards of the Indian Service will bear comparison with the best—and the work of Indian pupils is approximating that of white pupils in public schools, which marks a great advance in the last twenty years. Because of the language and cultural handicaps of many Indian children in Federal schools, these children require a year or more longer to complete the course of study designed for the first eight grades. Increasingly an eighth grade diploma from an Indian school is equal to a similar diploma from a public school.

Willard W. Beatty,
Director of Education.

October 1948

Part I

1. PROLOG—COMPARISONS

Public Schools Are Changing

It may be revealing to compare recently issued state courses of study with statements of educational philosophy and policy published by the Education Division of the United States Indian Service during the last ten years.

Any attempt to compare Indian schools with public schools leads to the question, *which public school?* Not all schools in any one state are identical. Practically every modern state course of study cautions teachers that they are expected to adapt the suggestions contained in the state course to conditions in the locality where the school is placed. Teachers are further cautioned as to the need for adapting the grade level goals of achievement to the individual differences among their pupils. Actually, there is no one such entity as *the* public school, even within as small a geographical unit as a school district.

Are all public schools good schools?

Any thinking person would probably disagree with parts of almost every state course of study.

Any live, wide-awake public school teacher can find fault with portions of the course of study of the state in which she teaches.

The more vocal among high school students often gripe about the courses of study and propose changes. (1)

Parents and the general public criticize the schools.

The colleges criticize the high schools.

The high schools criticize the elementary schools.

The military services criticized the public schools. (2)

The Education Policies Commission of the National Education Association and the American Association of School Administrators propose radical changes in public school education. (3)

State Departments of Education sometimes criticize their own schools. A study by the Research Division of the National Education Association shows a 33% increase in tempo in curriculum revision by the states in the one year following December 7, 1941. (4) **A Guide to Study of the Curriculum** (5) lists some nine pressing problems of people who live in the state of Oklahoma and then asserts, "Therefore, if any state curriculum ever needed adjustment to the realities of the general situation, the Oklahoma curriculum should need such adjustment." The **Course of Study for Elementary Grades** (6) of South Dakota states, "The leadership in educational circles must share in the responsibility for criticism because it has not provided for continuous revision of the curriculum . . . to meet changing conditions in the living of the children and the patrons of the school."

It is a healthy evidence of democracy at work that schools may be and are criticized. Criticism tends to bring about renewed self evaluation, a frequent preliminary to change. All change is not necessarily good but no improvement can take place without it.

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(1) **An Ex-Marine Looks at High School.** Saturday Evening Post, December 8, 1944. **See Indian Education,** February 15, 1946, for a digest of the article.

(2) **We Can Have Better Schools.** Maxwell S. Stewart, Public Affairs Pamphlets, No. 112. Public Affairs Committee, 30 Rockefeller Plaza, New York City 20.

(3) **Education for All American Youth.** National Education Association, 1201 Sixteenth St., N.W. Washington, D. C.

(4) **The Nation's Schools After A Year of War.** Frank W. Hubbard. National Education Association, 1201 Sixteenth St., N.W. Washington, D. C.

(5) State of Oklahoma, Department of Education, Oklahoma City, Oklahoma. 1941.

(6) Department of Public Instruction, Pierre, South Dakota, 1943.

Indian Schools Change Rapidly

Systematic and continuous developments have been taking place in Indian education during the past twelve to fifteen years. These changes have been accelerated by the findings of the Meriam survey, by the efforts of Carson Ryan, Jr., during his five years as Director of Indian Education, and by the energy of the present Director, Willard W. Beatty, and the staff of trained supervisors with which he has surrounded himself.

That Indian schools were able to move more rapidly in the direction of functional education than has been possible for most public schools systems is due to several things.

Indian schools are relatively free from political pressures.

Indian school administration is largely decentralized.

Indian Education (7) carries suggestions and practical advice to workers in Indian schools every two weeks throughout the school year. More recently the most cogent material from the first 95 issues has been reprinted in book form under the title **Education for Action.** (8)

Supervisors from the central office and from the five district offices have continuously visited schools to provide guidance and assistance, and to explain and implement the philosophy of Indian education. On occasion they meet with groups of Indian parents, lend an understanding ear to their suggestions or grumblings and aid in clarifying their puzzlements.

Service-wide summer schools provide another avenue for in-service training of employees. These sessions provide opportunities for sharing successful experiences. They deal with problems peculiar to Indian education which would not receive attention at conventional summer schools. They demonstrate, as well as theorize about, desirable methods and teaching procedures, personnel management, projects in livestock, agriculture, community service, arts and crafts, homemaking, child care, health and safety. Indian Service personnel and nationally known educational specialists from outside the Service are enlisted as faculty members.

Local and regional conferences are held.

Adult education activities, especially in the day school communities, acquaint parents with what the school is trying to accomplish, and help them with their own problems.

Until the outbreak of the war, the Indian Service carried on an apprentice-training program whereby college graduates of Indian blood were prepared for responsible positions in Indian education. (9)

Both day schools and boarding schools in the Indian Service frequently have land, livestock, and equipment rarely available to a public school system. A boarding school is the equivalent of a small town with many of the activities and services found in a town. The boarding school plant itself provides a real laboratory for experimentation in the fields of human endeavor which are important in everyday adult life. Such a school can provide more effective functional training of boys and girls than the most expensive and best equipped formal science laboratory of a public school.

Over the years, most Indian Service teachers have developed the habit of openmindedness, the willingness to try out new ways of doing things, and an ability to evaluate their accomplishments. Indian school teachers have been permitted to experiment with improved methods and new subject matter, and have had much help and encouragement in so doing.

A number of years ago, the Indian Service realized that excellent as many commercially published texts and teaching materials are, they fail to include some of the factual material and practical aids essential to successful education of Indian pupils. The Education Division, therefore, undertook the publication of appropriate reading materials for Indian children of different tribal groups—with special attention to the needs of youngsters who start school without the ability to speak or understand English. Included is a series of pamphlets on the history and culture of tribal groups, their crafts and their basic economy. This publication program now includes more than half a hundred titles and others are being added constantly. (10) The Education Division has also given teachers help in selecting from commercially published texts and reading materials those most likely to be effective for use with Indian pupils. Several thousand items are listed in **Suggested Books for Indian Schools,** which is revised from time to time. (11) Most of these approved books are available for examination by teachers at the Indian Service summer sessions.

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(7) Fortnightly publication of the Education Division, Indian Bureau, Washington 25, D. C. Edited by Willard W. Beatty, Director of Indian Education.

(8) Education for Action, Willard W. Beatty and Associates, Chilocco Agricultural School Print Shop, Chilocco, Okla. Available through Haskell Institute, Lawrence, Kansas.

(9) See **Indian Education,** No. 2. October 1, 1936. "Apprenticeship Training."

While the above tabulation is far from complete, it is lengthy enough to indicate some of the reasons why Indian education has been in the vanguard of the many school systems striving for better educational services in their communities.

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(10) See **Indian Education,** No. 46, November 1, 1940, "Introducing Written Navaho," and No. 84, March 15, 1943, "Books to Meet Your Needs."

(11) See **Indian Education,** No. 77, November 1, 1942, "Indian Booklist."

2. EDUCATIONAL APPROACH

General Concepts

In September 1936, the Education Division began issuing **Indian Education.** Through the medium of this fortnightly field letter the Director of Indian Education and his staff have endeavored to develop a unified, yet locally differentiated, approach to educational problems and procedures. Federal Indian schools serve Indians of Plains culture, Pueblo culture, and Woodland culture. They serve Indians who are agricultural and those who are non-agricultural, hunting people, pastoral people, fishing people, desert people, mountain people, arctic people, village dwellers and semi-nomads. Boys and girls from so many different environments, so many different social and economic societies, with so many differences in the life problems which they must face, cannot all make a functional design for their futures from one and the same pattern. **Education for Action** says, (12) "For a number of years the Indian Service has placed a great deal of emphasis on . . . adapting the educational program to the needs of the area in which a school is located. It has appeared self evident that the vocational training needed where livestock is the basic economic resource, must vary considerably from the training for irrigated agriculture . . . and from . . . an urban region offering opportunities for trades and industrial activities. . . . Because of these variations, the Central Office has not felt justified in offering a uniform curriculum for Indian schools.

"Attention has been called repeatedly to the fact that children and adults both learn to do by doing. The spoken or the written word, while a valuable aid in learning, cannot be substituted effectively for experience . . . The rewarding thrill that comes from finding the first few green shoots pushing through the newly planted garden is something impossible to reproduce within the four walls of a classroom by means of conversation or pencil and paper. . . . Such activities develop concepts that give meaning to words or ideas presented orally or in print.

" . . . The first essential is a clear statement of educational goals grade by grade. These goals must be explicit and within the capacity of the student to achieve. And they should be stated so clearly that their achievement can be objectively measured."

Indian Education in 1941 declared, (13) "Good education is not trade-marked. It varies as greatly as good teachers and as much as the needs of different communities vary. . . . No one pattern of teaching is required of all. . . . Learning which is based upon familiar experiences and which, therefore, has meaning for the child, accomplishes better results in less time. . . . Each teacher is urged to work toward the desired ends, by the methods in which he has confidence he can best achieve them. But it is hoped that each teacher will be sufficiently professional and sufficiently confident in his ability to grow and improve his teaching methods, to examine newer procedures and . . . try to adapt them to his own work. . . . If the children don't like school, don't speak English with increasing fluency, don't learn to read, and have no number reactions, the teacher is making a failure of his job regardless of whether he claims to be using *progressive methods* or *traditional procedures.*"

The Indian education service has always believed that a philosophy which encouraged schools to sense the unique problems faced by their pupils and to devise educational experiences related to the local environment would be a good philosophy for all schools. A similar point of view is expressed in some recent state courses of study.

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(12) **Setting Up Objectives,** p. 139, Education for Action.

(13) **Why Be A Progressive Educator?** Issue 64, Dec. 1, 1941, Pg. 1.

Curriculum Development in the Elementary Schools of New Mexico (14) states, "It is extremely important for the teacher to become acquainted with the community, survey its resources both as to goods and services . . . and utilize the community as a basis for curriculum development." **A Guide to Study of the Curriculum,** (15) says, "The Study of Part One, dealing with Oklahoma problems, should stimulate interest in the study of the same problem areas on a smaller but more definite scale. Local study groups will doubtless become interested in study of the local community for the purpose of discovering material that should receive attention both in curriculum plans, and in general community plans," and "If some parts of this plan are not applicable and other parts are, the committee will be happy to have such parts used as are applicable for each local situation."

Primary Objectives of Indian Schools

The primary objectives of Indian schools have been stated in all Civil Service examinations for teachers in Indian schools during approximately the last ten years. These objectives represent aspects of the philosophy of Indian education and inform teachers what will be expected of them if they secure a post in an Indian school. The objectives suggest both desirable subject matter and approved teaching methods and procedures. As evidence that certain states hold a philosophy similar to ours and that they advocate methods and procedures similar to ours, for each of the objectives listed a parallel is quoted from North Dakota Administrative Manual and Course of Study (16), supplemented by statements taken from other state courses of study. The eight primary Indian Service objectives are:

1. "To give students an understanding and an appreciation of their own tribal lore, art, music, and community organization." Elaboration of this point of view is found in articles in **Education for Action:** *Who are the Indians?* (p. 34), *Seek and Find* (p. 33), *Is Change Harmful?* (p. 36); *Generosity Outmoded* (p. 51), *Indians Will Work* (p. 60); and *The Adaptable Indian* (p. 59); *Etiquette* (p. 44); *Only One Right Way?* (p. 41) *Indian Foods* (p. 210); and in **Indian Education,** No. 6, *Arts and Crafts Board.*

North Dakota says, "To develop interest in the study of our forefathers; to give students an understanding of the civil and political problems existing in their community . . . " **New Mexico** says, "To impress the child with (the value of) the contribution which his ancestors have made to our American way of life." **Utah** lists *Our Cultural Heritage* as a major topic in the social studies course.

2. "To teach students through their own participation in school and community government to become constructive citizens of their communities." This statement is explained in more detail in **Education for Action,** *The Power to Decide* (p. 70), *The Pendulum Swing* (p. 74), *The Secret Ballot* (p. 75), *Teaching vs. Practising* (p. 78), and *Indian Citizenship* (p. 343), and in **Indian Education** No. 11, *Leaves from a Principal's Notebook*, and Nos. 115, 116, 117, *Tribal Self Government*. A like statement comes from the **North Dakota** document: "To give the student actual practice in citizenship through the school and community. . . . Mere learning of facts will not make a good citizen." **North Carolina** says, "The schools . . . should provide opportunities for children to live in a democratic way. . . ." **Utah** says, "The democratic way . . . is learned by practice in democratic ways of working with people from day to day."

3. "To aid students in analyzing the economic resources of their reservations and in planning more effective ways of utilizing these resources for the improvement of standards of living." Augmented material along this line can be located in **Education for Action,** *Breeding to Meet the Need* (p. 264); *Let Us Seek the Quality*

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(14) State Department of Education, Santa Fe, New Mexico, 1944.

(15) State of Oklahoma, Department of Education, Oklahoma City, Oklahoma, 1941.

(16) State Department of Public Instruction, Bismarck, North Dakota, 1931.

Market (p. 319); *Raise Your Own Fence Posts* (.p. 289; *Honey for the Papago* (p. 280, and in **Indian Education,** issues 112, 113, and 115, *Training for Rural Living.* Among objectives set up by the Vocational Agriculture Education Department of **North Dakota** are: "Ability to analyze the general agricultural situation in a community. . . . Ability to think a 'way out' of specific farm situations. . . . Ability to plan a long-time program of farm management."

Nebraska says, "Nebraska is essential (14) an agricultural state. Rural boys and girls are more interested in studying real farm problems, improved practices on the farm, information about the state and federal agencies which render service to the farmer . . ."

4. "To teach through actual demonstration, intelligent conservation of natural resources." The importance of conservation in many fields is further stressed in **Indian Education:** No. 7, *Have We a Responsiblity?* and **Education for Action,** *The Old Ways Were Sometimes Better* (p. 313); *Common Sense Inside the Home* (p. 293); *Land: Primary Resource* (p. 20); *Conserve What We Have* (p. 299); *Root Cellars* (p. 297). **North Dakota** comments that "A successful teaching program in vocational agriculture demands worth while projects. . . . School projects adapted to local farm conditions." The 1945 course of study includes units and other material on conservation. **Oklahoma** says, "Programs should be set up . . . that will enable children to engage actively in conservation activities. . . ."

5. "To give students first hand experience in livestock management, subsistence gardening, cooperative marketing, farm mechanics, and in whatever other vocational skills are needed to earn a livelihood in the region." These considerations are developed at greater length and in their application to various situations in the following article in **Indian Education:** No. 10, *Life Springs from the Land,* and in **Education for Action,** *Native Business Can Succeed* (p. 322); *What Teach? How Measure Success?* (p. 15); *Organizing Cooperatives* (p. 181). *Cooperative Education* (p. 184). *Vocational Fatigue* (p. 190), *Morgan Horses at Indian Schools* (p. 288); *Educating for What?* (p. 11), and *Labor is Honorable* (p. 16). The **North Dakota** bulletin insists that "Vocational education will be efficient in proportion as the environment in which the learner is trained is a replica of the environment in which he must later work. . . . Effective vocational training can only be given where the training jobs are carried on in the same way, with the same operations, the same tools, and the same machines as in the occupation itself. . . . The effective establishment of process habits in any learner will be secured in proportion as the training is given on actual jobs and not exercises on pseudo jobs.

Washington says, " . . . Pupils (should) experience appropriate functional relationship with farming through . . . a program of farm practice and that school enterprises be set up appropriate to conditions in different parts of the State."

6. "To develop better health habits, improved sanitation and higher standards of diet with a view to the prevention of trachoma, tuberculosis and infant diseases." Other more specific proposals for health education practices are given in **Education for Action,** *First Things First* (p. 198) and *Climate and Tuberculosis* (p. 216); and **Indian Education,** No. 21, *Watch the Thermometer,* No. 22, *Milk Must Be Pure;* No. 44, *Indian Service Trachoma Control;* No. 63, *Clean Dishes Reduce Sickness;* No. 94, *Right Eating for Health;* No. 106, *Trachoma Can Be Cured.* **North Dakota** makes similar pronouncements, "Love for health should be emphasized rather than fear of disease, . . . To influence parents and other adults, through the health education program for children, to adopt better habits and attitudes . . . in the family and community as well as in the school itself." Reference to health teaching is made in every course of study examined.

7. "To give students an understanding of the social and economic world immediately about them and to aid them in achieving some mastery over their environment."

Numerous articles in **Education for Action** supplement the ideas expressed in this objective, among them: *The Give Away* (p. 49); *Learning Self-help* (p. 21); *Realistic Character Education* (p. 339); *Fitting Education to Life* (p. 101); *One Service* (p. 344); and in **Indian Education,** No. 100, *America, Land of Opportunity;* No. 101, *How Long to Become a Leader.* **North Dakota's** objectives include, "To arouse in the pupil an intelligent interest in the many economic problems confronting society, . . . The child should come to feel some measure of personal responsibility in maintaining and improving the civilization which he inherits."

Nebraska says, " . . . to develop the ability to participate constructively in a social group for its greater good."

8. "To serve as a community center in meeting the social and economic needs of the community." Additional discussion dealing with the school as a focal point in the community is provided in the following pages of **Education for Action,** *Group Cooperation* (p. 99); *An Adult Shop for Navaho* (p. 280); *Weaving Comes to Pine Ridge and Stays* (p. 316); and in the following issues of **Indian Education:** No. 76, *Community Attendance Committee Functions;* No. 121, *Keep Reading Skills Alive.* **North Dakota** says, "Use the school for social purposes such as P.T.A., club work and community recreation." The **Oklahoma** bulletin, *Democracy at Work,* discusses in its concluding chapters services to the community which the schools can undertake.

The Three R's

The philosophy of Indian education recognizes the importance of the three R's in the educative process, but thinks of them as tools which assist the learning process rather than as distinct objectives in themselves unrelated to the child's other experiences. According to **Education for Action** in *Pretty Good, for an Indian,* such a statement is "not to be interpreted as indicating that the teaching of English, or social studies, or some phases of mathematics, or art, or science should be stopped. But we must face the necessity of reorganizing our teaching of these subjects in terms of very practical needs." . . . and in *Language—a Foundation Tool* this is said, "Until our Indian children not only learn to *speak* English, but also begin to *think* in English, our educational progress will be greatly delayed. . . . Our teachers must watch carefully their own expression of ideas, so that a few simple words and phrases are introduced at a time and used with sufficient repetition to gain meaning. . . . Rather than sitting quietly . . . waiting a turn to rehearse a phrase, our children should be engaged in a variety of activities . . . of the dramatic play type. . . . Small groups of individuals building, drawing or making things is much more vital than books, for the first school year. And while this activity goes on, the natural quiet conversation growing out of such activities is to be encouraged. In this way, language expression has a normal opportunity to develop. . . . The first grade teacher, therefore, should be more concerned with helping her children talk and think in English than with the problem of reading."

Carson Ryan, Jr., former Director of Indian Education, once said, "The 3 R's? Of course—to the extent that they are useful and have meaning for children. They should be well done. There is no excuse for sloppiness. At best, however, they form only a small part of the education of children. They must always be thought of as tools, not fundamentals of learning. They are not ends in themselves, they are tools valuable as they contribute to the real business of education, which is learning to live better."

In *Reading: a New Skill* in **Education for Action** (p. 153) is the following: "When white men landed on the North American Continent, no Indian tribe, so far as we now know, had developed a system of written records. . . . Today, thousands of our Indian children are being raised in homes in which the written word is almost as unknown as before the coming of the whites. . . . Youngsters raised in homes where reading is unknown come to school almost completely lacking in readiness for reading. They do not even know that language may be expressed in symbols. Not having been read to by their parents, they do not look upon books . . . as most white children do. . . . They have never entered the 'What does it say?' stage of curiosity, normal to white children. . . . Neither they, nor their parents, have experienced a need for reading, nor have known that written symbols of thought may play a large part in life. . . . Picture books of familiar things . . . should be conveniently accessible during periods when the children may voluntarily consult them. . . . Care should be taken to see that the pictures are representative of familiar things. . . . Countless opportunities will be presented in which it will be possible to convey the idea that symbols exist for recording the names of objects. . . . Later . . . blackboard records of ideas and events, plans and purposes may be introduced. . . . If during this time, the teacher finds frequent opportunity to read to the children out of simple, copiously illustrated books about Indians, books may come to have significance . . . The children may be asked to tell simple stories which their own drawings illustrate, and the teacher can write these on the margin. . . . Until experiences like these lead the children to express a desire to read for themselves, any attempt at instruction in reading may well be postponed. This may require months of waiting."

Course of Study for the Elementary Schools of North Dakota (17) devotes a section to problems encountered by teachers who work with foreign speaking children. "Before starting formal reading they should gain some fluency in speaking English." The bulletin adds some dozen specific suggestions for developing reading readiness on the part of such children.

Education for Action in an article entitled *The Place of the Experience Reading Chart* discusses the use of experience charts in teaching reading. **Curriculum Development in the Elementary Schools of New Mexico,** (18) pages 37, 38, stresses the value of this procedure. The same document considers the problems of readiness on pages 29-40, and the teaching of bilingual children on pages 320-330. A number of quotations from these pages will be found in the article on New Mexico included in this volume (see pages 56-63). Other material on the problem of teaching English to non-English speaking children will be found in **Arizona's** *Instruction of Bilingual Children,* (19) and in **California's** *Teachers' Guide to Child Development* (20), as well as in **El Paso's** *A Manual of Aids and Devices for Teaching Beginning Non-English-Speaking Children,* (21). **Oklahoma's** *Oklahoma Schools Move Forward* (22), pages 65-66, expresses a similar point of view. **Florida's** *A Guide to Improved Practice in Florida Elementary Schools,* (23) devotes an entire chapter to the language arts program and makes a number of points identical to those presented in **Indian Education. South Dakota's** *Course of Study for Elementary Grades,* (24), page 28, emphasizes the importance of making use of situations in which children enjoy rich experiences in varied activities with many materials as a means of developing reading readiness and facility in language use. **Utah's** *A Teaching Guide for the Elementary Schools of Utah* (25), pages 168-185, builds in detail the close relationship between the child's experiences and his growth of ability in the language arts.

The problem of writing is discussed in **Indian Education,** No. 55, April 1, 1941. in *All Want to Write.* "Writing is difficult. The physical labor of controlling a pen or pencil may be arduous, distasteful, and the rate of production so much slower than the rate of thought as to frustrate all but the most persistent. . . . A child's first handwriting should be restricted to those uses for which he sees a need. . . . A child's inventiveness and story-feeling are fostered by frequent experience in telling and dictating . . . Only harm can come from trying to force more mature forms of expression than children show themselves ready to use. . . . Since the child can write honestly only that which is truly his, time to assimilate experience and information is vitally necessary." While several recent state courses of study make similar recommendations to their teachers in regard to writing, quotations will be given from only *Oklahoma Schools Move Forward,* (26) which states that "Good writing should grow out of frequent natural writing needs. Natural writing experiences should develop within the school through meaningful situations created in the classroom, such as writing invitations to the homes, to friends, to other school groups, writing reports, plays, outlines, poems, stories, etc."

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(17) State of North Dakota. State Department of Public Instruction, 1945.

(18) State Department of Education, Santa Fe, New Mexico, 1944.

(19) Arizona State Department of Education, Phoenix, Arizona, 1939.

(20) California State Department of Education, Sacramento, Calif., 1936.

(21) School Board. The El Paso Public Schools, Texas, 1945.

(22) State of Oklahoma, Department of Public Instruction, Oklahoma City, Oklahoma, 1945.

(23) State Department of Education, Tallahassee, Florida, 1940.

(24) Department of Public Instruction, Pierre, South Dakota, 1943.

(25) State Department of Public Instruction, Salt Lake City, Utah, 1941.

Thinking in Numbers, **Education for Action,** p. 162, points out that the average Indian child is not number conscious. "His concept of number is one, and more than one. Buying and selling and the exchange of money, working for wages, dividing his time by the ticking of the clock are the acquired knowledge of adults. They are not natural to the children. The world in which he lives is founded upon an understanding and a usage of nature. It does not segregate or numeralize. It is not acquisitive. . . . Teachers should not forget that they are starting from scratch. There are no concepts, there is no familiarity with symbols and there has not been a feeling of need. A great part of the day for the beginning class should be the seeing and touching and handling of objects. Long before they are counted they should be handled and grouped. . . . When counting is first begun, if the objects are grouped instead of put in lines, the task from there on will be much easier."

In *How Much Drill?* **Education for Action,** p. 164 is this comment, "Drill serves its purpose when it aims at efficient habit formation. Development of meaning should precede drill. In all drill there should be consideration of individual student needs. Drill to be most efficient must be purposeful in the mind of the child."

Curriculum Development in the Elementary Schools of New Mexico, (27) like many other state courses of study and like **Indian Education** devotes a great deal of space to problems in the teaching of arithmetic, and has this to say at one point, "If teachers could only delay the beginning of the formal attack and the *drill* on facts until children are ready, aware of the meanings and interested in learning the facts, much time would be saved, and what is more important, the children would gain good attitudes and the real habit of using arithmetic in thinking."

In addition to the references quoted above, there are many other articles in **Indian Education** which show the point of view and the concern of Indian schools about practical learning experiences in oral English, reading, writing and number work. Some of these are: *Indian Readers* in No. 3; *Why Have A School Paper?* in No. 13; *Buying Books* in No. 18; *Talk and More Talk* in No. 23; *A New Booklist* in No. 24; *Education Division Pamphlets* in No. 38; *Indian Texts Ready for Use* in No. 47; *Indian Booklist* in No. 77; *Discussion Groups for Students and Faculty* in No. 80; *Books to Meet your Needs* in No. 84; *English Teaching and The War* in No. 87; *More Indian Service Publications* in No. 90; *To Read and Write Native Languages* in No. 98; *Learning Foreign Languages Faster* in No. 99; *Speak Up!* in No. 103; *Freedom from Ignorance* in No. 104; *Pre-Induction English* in No. 114; *Language Unlocks the Intellect* in No. 119; *Keep Reading Skills Alive* in No. 121; *Teaching the ABCs* and *Literature is Life* in No. 125; and *Minimum Essential Goals for Lower Grades* in No. 137.

Education for Action presents the following articles to the same point: *The Wisdom of the World Lies in Books* (p. 161); *Language Barriers* (p. 248); *The Use of Workbooks* (p. 170); *The Limitation of Language* (p. 250); *Care in Interpretation* (p.247); *From Where We Are* (p. 195); *How to Teach Simple Arithmetic* (p. 165); *Experience Reading* (p. 157); *Writing for Pleasure* (p. 175); *Writing for Business* (p. 178).

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(26) State of Oklahoma, Department of Education, Oklahoma City, Oklahoma, 1945.

(27) State Department of Education, Santa Fe, New Mexico, 1944.

Providing For Individual Differences

From Where We Are (**Education for Action,** p. 195) discusses individualized instruction. "When it became possible to define what went into each of the six or eight grades . . . it should have been possible to individualize teaching and to increase the amount of individual attention each child received. . . . It has been evident from the beginning of schools that different children learn at different rates of speed and with differing degrees of thoroughness. Regardless of how hard a teacher strove to teach every child the same thing, reviews and examinations continued to reveal that her success varied from almost 100 per cent to practically zero. . . . Locally it is desirable that some sketch of probable sequence of teaching units be prepared . . . at least some guide to indicate what has happened and what is expected to follow. But the very freedom from a uniform course of study is intended to provide the stimulus to take children where they are and carry them as far as they are able to go. . . . If a teacher's class never reaches the content she originally planned to teach them, but has mastered the basic tools of learning, their time with that teacher will have been well spent."

In **Education for Action** *Teaching in Small Groups*, p. 145, is this statement, "Most teachers agree that emphasis should be on individual growth instead of the acquisition of subject matter. Likewise most teachers will agree that the individual needs of students can be met most effectively by teaching in small groups instead of *en-masse*."

Why Be A Progressive Educator in **Indian Education,** No. 64, contains additional comments in the same vein. "Because many modern methods in education take into consideration the differing needs of different children, they must of necessity be more informal than the older practices, which assumed that every child had to respond equally to every situation. Good teachers are interested in what is happening to each child, and are ready to modify their teaching approach to that of the child's level of interest or ability. A good teacher . . . says, 'If I haven't taught John how to talk or read by the methods I'm using, how can I change those methods to better help John?' "

What do some public school systems have to say about dealing with individual needs of pupils? *Ways to Better Instruction in Florida Schools* (28) states, "From birth, each human organism is unique, dynamic and creative, different in potentialities from all other human organisms. . . . The individual learns what has meaning and significance for him at that particular stage of his development." *A Guide to Improved Practices in Florida Elementary Schools* (29) carries on the discussion with, "In the course of group activities . . . many opportunities for the use and improvement of personal abilities will arise. . . . The teacher should provide in the daily program a time for individual instruction. . . . Such a division will enable the teacher to know individual pupils and to guide them adequately. . . . Some pupils do not grasp information as rapidly as others; timid children often do not make known their desires before the entire group. In addition to those needing special aid in skills or in personality development, a number of the pupils who are doing more advanced work may need special attention. The teacher, through spending small amounts of time with these children during the period devoted to meeting individual needs, may enable them to go far in independent problem solving."

Minnesota's *The Curriculum for Elementary Schools* (30) affirms that "the teacher must know not only children but individual children and must appreciate the fact that education is not dead formalism but rather the active participation of children in life's activities. . . . The adjustment of the materials of education to the varying needs of children is the responsibility of the teacher. Her . . . understanding of his needs will be most effective in assisting him to grow in self-directed and self-chosen ways of behavior."

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(28) State Department of Education, Tallahasse, Florida. Bulletin No. 2, 1939.

(29) State Department of Education, Tallahasse, Florida. Bulletin No. 9, 1940.

(30) State of Minnesota, Department of Education, Minneapolis, Minnesota, 1928.

Washington's *Temporary Guide for the Elementary School Curriculum* (31) comments that "Any curriculum that is a means of achieving the desired goals should be flexible to accomplish its ends. Flexibility involves responsibility as well as freedom. . . . Where the program is considered to be a means to maximum child learning, it will need to be flexible to meet the current needs of the situation. . . . Children vary greatly in mental capacity at every age level. Also there is a marked variability in the growth curve of each individual child. . . . In evaluating school achievement the principal question will not be, *Are these children all up to grade standard?* but rather, *To what extend is each child achieving according to his ability to achieve?* and *What factors are affecting this child's progress?* Adaptations of subject matter, materials and methods must be made to meet individual capacities and needs. . . . This guide is not intended to be a finished product, for no curriculum program is ever completed in a final sense. In the hands of the teacher it should undergo changes to suit individual pupils, school and community."

Healthful Environment

Throughout its existence, **Indian Education** has carried suggestions for maintaining a healthful environment in classrooms, shops and dormitories. (32)

Many state courses of study include among their objectives that of providing a school environment conducive to physical and emotional well being. Many of them suggest specific teaching units on health. **Oklahoma's** *A Guide to Study of the Currriculum* (33) devotes an entire chapter to consideration of health as one of the major problems of the state. *Oklahoma Schools Move ForWard* (34) gives considerable space to health and safety in the school environment, and approaches the point of view of Indian education when it says, "The school's duty does not end with classroom teaching of health and safety. The school should assume the responsibility for promoting the general health of the community. In order to make the health program functional, each school should know the needs of the individual community and plan to meet such individual needs." Discussing aspects of education which should have greater emphasis in the elementary school, the volume pleads for better provisions for conservation of human resources. Regarding trends in secondary education, it notes that "schools are broadening and intensifying their programs . . . have increased emphasis on first aid and safety education by 73 per cent and on physical education by 72 per cent since the war started . . . are participating in county nutrition education programs . . . are offering physical fitness work. . . . The hot lunch program is being used in most communities. . . . The general increase in number of admissions to mental institutions would seem to justify the inclusion of instruction in emotional stability."

Active Learning

Goals Necessary, (**Education for Action,** p. 139), advances the idea that "If teachers could only realize that an activity program does not mean *no standards, no goals,* but that it is only another method of helping the child attain the skills and knowledge required for life in his particular environment, it might help them to guide children into more purposeful activities. . . . A mastery of the fundamentals in reading, writing and numbers was, in the old formal program, an end in itself. . . . In the modern activity program . . . through the use of an activity which is interesting and worthwhile, the need for mastery of fundamentals becomes felt and the child has an incentive for learning."

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(31) Office of the Superintendent of Public Instruction. State of Washington, Spokane, Washington, 1944.

(32) Indian Education
No. 9, Mar. 1, 1937. Temperature and Humidity.
No. 12, April 15, 1937, Fire Hazards.
No. 78, Nov. 15, 1942, Class and Studyroom Lighting.
No. 34, Dec. 15, 1939, Athlete's Foot.
No. 89, Sept. 15, 1943, Moccasins.
No. 4, Nov. 1, 1936, Six Weeks To Live.
No. 17, Oct. 15, 1937, Climate and Tuberculosis.
No. 8, Feb. 15, 1937, Trachoma Among the Navaho.
No. 44, Oct. 1, 1940, Indian Service Trachoma Control.
No. 76, Oct. 15, 1942, My Experience With Trachoma.
No. 106, Oct. 1, 1944, Trachoma Can Be Cured.

(33) State Department of Education of Oklahoma, Oklahoma City, 1941.

(34) State Department of Education of Oklahoma, Oklahoma City, 1945.

Indian Education No. 23 in *Talk and More Talk* deals with the imperative need for teachers in Indian schools to encourage non-English speakers to speak the English language which many may encounter for the first time when they come to school. It says, "The major job of the elementary teacher is therefore to create an environment which will stimulate activity and growth. If children are *doing things* under the guidance of a friendly and understanding adult, they are temperamentally and emotionally responsive to new ideas. Few new ideas attract children as readily as new possibilities in language. . . . One can't arouse talk about nothing. A bare classroom, each pupil with his own desk and chair, is a barren place. What is there to talk about and who wants to discuss it? Introduce a rabbit or a chicken, a box of lizards or a hive of bees, the situation is instantly changed. Supply blocks . . . paper and crayons . . . dolls and tops . . . and in time . . . if not directed or forced, spontaneous talk will be inevitable."

Pupil Activity or Teacher Activity, (**Education for Action,** p. 143), takes the reader on a supervisory visit to the classrooms of four different teachers, some of whom "have learned the secret of letting children do things for themselves, of placing responsibility upon their shoulders, realizing that children grow when given opportunity for self direction . . ."

A Guide to Improved Practice in Florida Schools (35), in a chapter entitled *A Growing Teacher and a Growing Faculty*, takes the reader on an inspection tour to a classroom at each of four stages in the transition of a specific sixth grade teacher from the stage where she plays the dominant role to the stage where she shares with the children the planning of their activities, gives them increasing opportunity to carry out their plans and to evaluate their accomplishment. At the fourth level, "The teacher . . . is eager to discuss the varied activities of her program and the changes in child behavior that she attributes to changes in the curriculum and in her own procedures. . . . At this level the schedule is more flexible. Large blocks of time are arranged in which purposeful activities are carried out."

From *What Teach* (**Education for Action,** p. 15), this quotation is taken, "One can't learn cattle raising or farming, shoe making or carpentry in 90 minutes a day sandwiched in between 45 minutes of English and 45 minutes of mathematics. The ebb and flow of life on the farm or range cannot be made to conform to summer vacations or Sundays off, and a school program which pretends that reality partakes of such artificial divisions of time and effort can only delude the student, not prepare him for participation in life."

The May 1, 1937, issue No. 13, of **Indian Education** in *Why Have A School Paper?* discusses such an activity as a means of pupil growth and development.

Education for Action, page 264, in *Breeding To Meet the Need*, says, "Education means knowledge plus experience. How can a student gain experience in relation to the selection and breeding of plants unless he selects and saves seed in a program which has conserved the results of breeding year by year? . . . When seeds and plants are selected with . . . catalogs in the hands of the students, and when later the students plant the seeds they order, or seeds saved from the year before, with full knowledge of the varieties, of their valued characteristics . . . the work connected with planting will be work, but *interesting work* . . ."

Education for Action, page 63 in *Pretty Good, For An Indian*, we find: "Our Indian farmers-to-be must be given the opportunity to farm for several years under practical conditions, and with as little adult interference as possible, while still enrolled in our schools . . . Potential Indian cattle-men must be given similar experiences to the end that they are graduated because they have carried a man's responsibility successfully in dealing with cattle. Boys and girls interested in poultry raising must care for practical flocks of chickens. . . . Carpenters and bricklayers must build actual houses and not toy models."

Education for Action, page 234, states:

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(35) State Department of Education, Tallahasse, Florida, 1940.

"It is believed that life in the cottage dormitories should be as much a well planned educational experience as any other phase of the school program. Boys and girls should both participate in . . . the homemaking activities. . . . Instruction in home economics and homemaking should be adequately cared for in this environment. . . . Many other phases of instruction, the main objective of which is to develop wise use of leisure, such as the development of taste in literature and music could well be carried on in the home atmosphere of the cottage living room."

Teaching in Small Groups **Education for Action,** page 145, says, "To discover, through experimentation, that there are forms of invisible life is far more effective in building a scientific attitude toward disease than merely reading about the germ theory. . . . To make a bookcase to fit a given space fixes the concept of feet and inches in a much more meaningful way than learning the table '12 inches equals 1 foot.' . . . Children who make bacterial count on dishes washed by different methods . . . gain understanding in health and science."

Alabama's *Program of Studies and Guide to the Curriculum for Secondary Schools* (36) lists numerous activities for junior and senior high school—among them construction activities, dramatizing, holding exhibits, taking trips, giving programs or parties, making collections, working on a soil erosion control project, making graphs and charts, interviewing people, preparing class books, making clothing and house furnishing, preparing school lunches, publishing a school paper, and numerous other kind of pupil activities. This publication asserts that "Activities are concerned with the personal and social problems of the pupils living in their communities. . . . The study, the planning, the doing, and the judging are in keeping with these needs and interests."

A Teaching Guide for the Elementary Schools of Utah (37) indicates that "Learning results from activity. . . . It should be stated here that the definition of activity is not taken to mean physical activity only. . . . Since small children are muscularly very active, physical activity might be expected to be much in evidence. . . . In the modern curriculum there is less reliance upon indirect and vicarious experience with a corresponding increase in emphasis upon the child's own concrete experiences."

A number of recent state courses of study list . . . in addition to objectives and desired outcomes . , . various types of activities carefully selected to assist both teacher and pupil in realizing the stated objectives. Frequently the activities are presented under some such heading as "Aids in Teaching." Even more frequently the suggested activities are listed as integral parts of units of work. In this latter category are the materials of Alabama (1941), Arizona (1938 and 1948), California (1936), Colorado (1942), Kansas (1940), Nebraska (1941), New Mexico (1944), North Carolina (1942), North Dakota (1945), Oregon (1945), South Dakota (1943), Utah (1941), Washington (1943 and 1944), Wyoming (1943).

Teachers' Guide to the Kansas Elementary School Program of Studies (38) devotes considerable space to the discussion of units of work and activities. "One of the major trends in modern education is that of developing the school curriculum around a sequence of so-called major 'activity' or 'experience' units. The movement . . . is rapidly spreading. Because the 'unit of work' (often termed 'activity' or 'experience' unit) is based upon sound principles of learning and embodies modern educational philosophy, it is essential that a teacher not only gain an understanding of the unit concept but that he develop the ability to apply this concept of education to his own teaching. . . . The unit of work idea grows from the understanding and acceptance of certain principles of child development and is an attempt to make these, as well as our educational philosophy, **functional** in the classroom. . . . The activity minded teacher is very much concerned with the whole development of the child. . . . His chief responsibility is stimulating desirable forms of activities on the part of his pupils. . . . **The test of a unit of work . . . is what the children are doing (experiencing), and what pupil growths are being stimulated."**

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(36) State Department of Education, Montgomery, Alabama, 1941.

(37) Utah State Department of Public Instruction, Salt Lake City, Utah, 1941.

(38) State Board of Education, State Superintendent of Public Instruction, Topeka, Kansas, 1941.

The Kansas bulletin says that among the problems faced by a teacher who is planning a unit of work are, "What are the worthwhile pupil activities which may be stimulated through this unit which will contribute directly to the desired outcomes of education. . . . What materials, including reading materials, are needed to carry out this unit?" There follows a list of desired pupil achievements in "understandings, attitudes and appreciations, and essential abilities," several of which are, "ability to work with others, appreciation of beauty in nature, music and art, understanding the ways in which modern science has changed man's ways of living and thinking, to plan and execute plans better, and better schools, and, consequently better community citizenship." After stressing the value of activities, the bulletin remarks that **"Such experiences result in lasting change in a pupil's conduct and ways of thinking. Subject matter learned through more formal classroom procedures is soon forgotten and affects the child's attitudes and appreciations very little."**

The bulletin continues with, "Discussion will form a part of almost every period of the day. . . . In the development of a unit of work there is usually a daily planning period and an evaluation period. These two parts of the activity period are set aside for group and individual planning prior to the beginning of construction, dramatic play, research, or excursions, and for self and group evaluation of the particular activities of the day."

Kansas educational authorities recognize that "While it is often difficult to find a number of books of different levels of reading difficulty on the same unit, it is not at all impossible to do so. If we believe in adjusting the curriculum to the pupil we must provide reading material which he can read and understand. . . . Undoubtedly the unit approach to education requires a much greater selection of reading, as well as other materials, than do the more traditional ways of teaching. . . . The teacher should list needed construction and art materials, visual materials, laboratory supplies and other materials which he is sure will be required. The lack of equipment to build trains or trucks when a first grade class is ready to begin construction is most deadening and may result in the children losing interest in the unit. . . . A large share of the materials can and should be obtained by the children themselves. Doing this provides a most worthwhile learning experience. Finding out where raw rubber and other desired samples can be obtained and then writing for them are learning experiences which should not be denied the pupils."

A Guide to Study of the Curriculum (39) makes these comments: "When a purpose has been accepted by an individual he makes an effort to modify conditions in order to bring about the desired result. In order to achieve this purpose, the individual may employ a variety of means, each of which may be called an activity. There are two types of activities, the physical and the intellectual. They are dependent on each other. The growth and development of these are interdependent; anything that affects one affects the other. Physical activity has to do with bodily movement. It makes for motor control and physical fitness which are basic for all learning, but unless it is guided it will contribute nothing further. *Activity for activity's sake* has no educational value. Intellectual activity is the effort made in solving problems, in acquiring information, in organizing and arranging types of information for use in different situations, in constructing and producing material objects, in giving expression to creative abilities, and in employing time for re-creating the individual. . . . Since learning can result only from activities, the teacher necessarily will have to be aware of the skills necessary for successful performance of the activity participated in by the individual."

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(39) State of Oklahoma, Department of Education, Oklahoma City, Oklahoma, 1941.

Flexibility

Education for Action, page 30, in an article entitled *Flexibility* says, "Each individual school . . . faces its own problems and the school must be flexible enough to meet the need. What is true in Dakota will not be true in Oklahoma or California. . . . The task of the school staff is to analyze the need and propose a program to meet it. We . . . hope to be sufficiently flexible in our turn to modify regulations . . . to facilitate the development of suitable local procedures. Face your problems in terms of their indicated solutions. It is not a question of making the pupil fit a predetermined school program. . . . Your duty is to develop a program which fits the child and his needs . . . dare to attack your own problems with imagination and originality."

Education for Action, page 17, the article *Capacity to Change* carries these statements: "There are those who are content to learn a simple formula. . . . " Contrasted with them "is a small group of eternally restless individuals whose imaginations are not content with the routine repetition of a task once learned and who spend a great deal of their time looking for better ways in which to do the things that must be done. . . . If the training offered to Indian young people in federal schools is to fit them to take advantage of the opportunities which will be offered them after graduation, these problems must be approached courageously and with imagination. . . . The Indian Service for the past five years has expended considerable sums in in-service training through numerous summer schools in an effort to provide opportunities for each of its teachers to qualify to meet the challenge of Indian Education."

Curricular Guide Adaptable to Elementary Schools of Idaho (40) is dedicated to "every Idaho teacher who understands the child and the society in which he lives, visualizes the school as a community center, is ever-conscious of the teacher's role in perpetuating democracy, and realizes that the good school must always be somewhat experimental. The suggestions on curricular philosophy, content and procedure, based on official yearbooks and authoritative professional references, are intended to guide, not prescribe; to stimulate, not handicap; to foster curricular progress, certainly not to recommend a fixed program. . . . Approved education is an attempt to harmonize instructional practice with the laws of human nature and society, and emphasize in the curriculum those items which can be justified on the basis of social utility. . . . Having the child understand the civics text doesn't necessarily make him an exemplary citizen in a democracy; teaching him grammar rules won't insure correct English usage. . . . That learning procedure constitutes his curriculum which is . . . not a mimeographed product but actual learning activities in improving health, developing desirable social relationships, using leisure time wisely, practicing worthy citizenship, and acquiring the fundamental knowledge, skill, habits and attitudes."

Curriculum Development in the Elementary Schools of New Mexico (41) says, "Teachers are urged to adapt the materials to the needs of the communities in which they teach. . . . It is further suggested that teachers enrich and supplement the learning experiences recommended. . . . There must be flexibility to work around large centers of interest. . . . Every day may differ, for growth implies constant change."

Oklahoma Schools Move Forward (42) maintains that "In static, mechanical occupations, the training necessary for the job once learned, is sufficient for all time. But teaching being a human enterprise must of necessity be dynamic. . . . We must regain the attitude that a teacher's education is never completed, and that improvement is always possible through study, planning, experimentation and evaluating."

Surveys—Foundation for Curriculum Building

Indian Education, No. 31, November 1, 1939, in *"Taking the Lag Out of the Curric-*

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(40) Superintendent of Public Instruction, Department of Education, State of Idaho, Boise, Idaho, 1943.

(41) State Department of Education, Santa Fe, New Mexico, 1944.

(42) State of Oklahoma, Department of Education, Oklahoma City, Oklahoma, 1941.

ulum," states that the Indian school "is called upon, not only to supply generalities of education, but to contribute directly to the reorientation of a minority culture group faced with . . . adjustment to a surrounding majority whose culture pattern is totally different. Education . . . must clearly define its objectives and then organize its training program so as to furnish continuing well-directed and specific instructions which will lead to a realization of those objectives." To aid schools in devising instruction related to the needs of their students, "a continuing vocational survey of the areas tributary to Indian Service vocational high schools was approved." This same issue of **Indian Education,** and No. 32, November 15; No. 41, April 15, 1940; and No. 48, December 1, 1940, give details of such surveys conducted for Pine Ridge, Sherman Institute and Phoenix. Issues Nos. 54, March 15, 1941; 55, April 1, 1941; 56, April 15, 1941; 57, May 1, 1941; and 58, May 15, 1941, and **Education for Action,** pages 270-276 outline changes which have been undertaken at these schools as a result of the surveys. Compare with the above this statement from **A Guide to Study of the Curriculum** (42), "A survey of each of the communities of Oklahoma is now under way . . . the local survey activities with the things that grow out of them will set up local areas of vigorous activity drawing their energy . . . from the velocity of the mainstream of the state wide program. Meanwhile the main state program should travel on . . . with . . . attack on such problems as . . . the proper reorganization of the secondary program in order to give it a more functional quality, the relation of vocational education to general education. . . . " The major portion of this Oklahoma bulletin, p. 11-98 is itself a survey of the most pressing social and economic problems of the state.

Guidance

Indian Education, No. 17, October 15, 1937, in *Self Deception*, says, "Last year an analysis of pupil *ambitions* on one northern reservation revealed that the elementary youngsters . . . looked forward without exception to some type of life activity at home or on the reservation. Yet all high school seniors on the same reservation expressed themselves in terms of urban activities *off the reservation*. . . . The answer to how this change had come about was revealed in an analysis of the attitudes of the high school teachers toward reservation life. . . . The fact that subsistence gardening, cattle raising, tanning, harness making, blacksmithing and similar activities . . . offered opportunity for self sufficiency was completely ignored," and the fact that "Most girls of the age of high school graduates married . . . was even looked upon as an evil to be postponed if possible. Naturally, children so conditioned had lost touch with reality. . . ." This quotation may be compared with the following from **A Guide to Study of the Curriculum** (43): "A sizeable part of the **youth problem** is based on an unjustifiable expectation, and is, therefore, spurious." Speaking of occupational misfits, the bulletin continues, "The secondary school has received a great deal of deserved criticism for these maladjustments, because of its failure to change with the times. . . . The fact that many of our youth that are listed as employable have no qualifications for any type of work, other than a willingness to accept it, is a direct slap at our educational system. One out of three of our youth want 'white collar' jobs, whereas only one worker out of sixteen actually has such a job. The choices of our youth reflect the distorted values society places on 'white collar' versus manual work. The educational system has faithfully perpetuated these distorted values by preparing youth for 'white collar' jobs only. . . . There are thousands in our secondary schools, pursuing courses that have no significance or value for them."

Toward Improved Living

Indian Education, No. 25, February 15, 1938, in *The Practice Cottage*, discusses the problem of improving native housing and points out that "planning for the future must begin with what is possible and look forward to gradual improvement of existing facilities. Our schools, therefore, need typical Indian cabins for practice cottages which the students may learn through experience to improve. Change will take the form of an extra room, simple but comfortable furniture, more effective provision for personal cleanliness and the washing of dishes and clothes, more efficient heating and ventilating, or the use of inexpensive paints for colorful decoration. Girls and boys planning such things in school can visualize similar improvements being made in their own homes."

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(43) State of Oklahoma, Department of Education, Oklahoma City, Oklahoma, 1941.

The Oklahoma publication, **A Guide to Study of the Curriculum,** (44) points out that all but perhaps 10 per cent of the people of Oklahoma "are living in the same cracker-box houses in which they found homes when the state was admitted to the Union, the only difference being that these houses are a third of a century older. Village and open country houses are conspicuous for neglect of upkeep. . . . The fact that only 1.4 per cent of elementary school time has been devoted to study of home problems indicates that the school might do more to generate interest and influence activity in correcting these conditions."

Indian Education, No. 26, March 1, 1938, in *The Test of Education is the Job,* points out that, "While the ability to read and compute are needs of every literate citizen, the ability to succeed in chicken ranching, general agriculture or stock raising, the technical skill to be a good printer, a good shoemaker, a good weaver, or a reliable auto mechanic, require particularized training. . . . We need to know whether there is a prospect that, as a result of his training, the student may earn a livelihood after he graduates. . . . The school must continuously adapt its curriculum in terms of the demands of the community. Not until it faces the problem of placing its students will the school become sufficiently sensitive to these demands. What has become of your graduates this year? How many of them can you place—on a farm of their own, or in a job?"

In a letter dated January 20, 1945, from the Superintendent of Public Instruction for New Mexico to the members of the Special Committees charged with revision of the secondary school curriculum are listed a number of general objectives for the secondary schools of the state, among which is "to understand the value of work as a factor in the development of character; to apply his knowledge and training to the acquisition of skill in his chosen vocation."

Alabama's **Program of Studies and Guide to the Curriculum for Secondary Schools** (45) lists four groups of objectives for education. One of these groups is called, "Objectives of Economic Efficiency." For the secondary schools of Alabama, the bulletin insists that these objectives "must be approached in terms of a state which has a low per capita income . . . a high rate of farm tenancy, a low percentage of adults who actually exercise the privileges of citizenship, a state which is predominately agricultural. . . . There is a dearth of technically trained persons and skilled tradesmen. It would seem, therefore, that our state needs to pursue diligently and for some time to come those objectives analyzed under the head of economic efficiency. Consideration must be given to . . . the need to do some useful work, to lay the foundations for vocational success. . . . The development of interests and understandings which have to do with vocational choices must be associated with the total development of the pupil. . . . The study of the community and the region provides data which are significant to young people who are about to be thrown upon their own resources to earn a living. . . . They should grow in the adjustment of their attitudes and ideas about jobs, success and respectability, and in the willingness to face realities as regards the opportunities for employment. . . . They should develop work skills, muscular skills, and work standards. . . . The school will . . . be concerned about helping students to obtain employment and to make good in whatever they undertake. . . . When the community understands the loss in human resources which it sustains through the emigration of its youth, organized efforts will be made to prevent such loss."

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(44) State of Oklahoma, Department of Education, Oklahoma City, Oklahoma, 1941.

(45) Department of Education, State of Alabama, Montgomery, Alabama, 1941.

Indian Education, No. 31, November 1, 1939, in *Taking the Lag out of the Curriculum*, points out that "the curriculum of many Indian schools has been developed without much regard to the vocational needs of the area served by the school. As a result, pupils who graduate possess skills for which there is no demand, and opportunities for self sufficiency are neglected for want of adequate educational training. . . . The Indian school . . . is called upon not only to supply the generalities of education, but to contribute directly to reorientation of a minority culture group faced with inevitable adjustment to a surrounding majority whose culture pattern . . . is different. . . . Education in this case must . . . organize its training program so as to furnish continuing well-directed and specific instruction which will lead to realization of these objectives."

Indian Education, No. 42, May 1, 1940, in *Fitting Educational Patterns to Life Patterns*, carries these statements: "To live is to enjoy and participate in the society and culture of one's own group as well as to make a living. . . . Just what form the desirable life and making a living takes, depends upon the customs, the society, the language and the resources of the group to which a person belongs . . . : land utilization and land management, the potentiality of resources, irrigation methods, cattle and crop economics, soils, climate, housing, home management, local foods, arts and crafts, native social organization, family, clan and tribal cooperation, new tribal and district councils, native political systems, medical practices and health needs, Indian Service and reservation administration, cooperation with other government divisions, living by home resources or by wage work in industry, native ceremonies, white society of the reservation, town and state, the improvement of native life by adopting advancements of American life, cultural progress and change in tribe, population problems and social adjustments and maladjustments, should all be subject of study for every Indian being educated. They are part of the study of the whole environment, but the problems are also distinct for each tribe or each reservation. . . . To face the background of specific reservations and tribal economies and societies, instead of assuming a generalized Indian background or a generalized American one, is the most practical approach to providing the adjustment and success in modern life that both Indians and interested Americans desire."

From **Education for Action,** page 11, in *Educating for What?* come these declarations: "The world will always need its hewers of wood and its drawers of water. . . . The time will never come when all can make a living as lawyers, doctors, teachers, bankers or stockbrokers. The assumption that education is a stepping stone from work with the hands to work with the brain is fundamentally fallacious. We need educated and intelligent hand workers, for within any conceivable period of time there will be many more of them than all the rest of mankind put together. They are the ones whose votes will determine the personnel of our . . . government. It is their tastes which will . . . decide whether we have playgrounds or dump heaps, libraries or pool halls . . . as the basic training ground for youth. . . . It should be clear that teachers who urge education as an escape from labor, rather than an enrichment of the life of labor, are contributing to a breakdown of the social structure, for which they offer no compensating balance."

Making Education Real

Indian Education, No. 125, November 15, 1945, in an article, *Student Projects* uses these words, "An attempt has been made to provide opportunities for realistic experiences in the education of students. . . .Student project funds have been generally available to finance the erection of hen houses, hog pens, shelter sheds, etc., in connection with many of the agricultural programs . . . so that spinners, weavers, pottery makers, and other craft workers may have raw materials in large enough quantities so that the students may actually become proficient craftsmen through continuous, adequate and practical experience in doing the job which they may do later for a living. . . . Each step of the planning as well as each step of the actual work must be experienced by the students. . . . If reality is to be permitted to enter into the teaching program, it will be necessary to revolutionize our thinking about schedules, division of time . . . and recognize that in building a house almost every kind of learning experience can become involved if we will only permit it to come in at its natural point. . . . If we learn to leave with each project all of the naturally associated problems, and give adequate time for their solution, building a house, raising a garden, caring for livestock . . . can become educational in a very wide sense."

PART II

REVIEWS OF STATE COURSES OF STUDY

Beginning with the issue of November 1, 1945, No. 124, and concluding in the issue of October 15, 1946, No. 139, **Indian Education** presented a series of reviews of several state courses of study. Others are included in this volume. The issue of January 15, 1946, No. 128, explains the purpose of the series in these words: "In the past ten years the public schools and the Indian Service have come to speak a common language. . . . **Indian Education** preaches no educational 'ism'—it has simply presented an objective analysis . . . of the educational problems confronted by the teachers of the Indian Service with concrete suggestions for their solution. We have recognized that many of these problems are typical of American rural education—and the solutions are those of any practical rural school. . . . It is today . . . gratifying to discover that the pattern of education presented through the past ten years by the Indian Service—which has often been referred to as a pioneering approach to rural education—is today taken for granted by the public school systems with which we are cooperating."

The reviews of public school courses of study reprinted in this volume should help confirm the conscientious Indian Service teacher in the feeling of the rightness of what is being done in our schools. These digests "may reassure some of the Indian leaders that Indian schools have been really concerned with their needs; that the Indian Service has pioneered a program of rural education which the states in which we operate now subscribe to with few reservations for all rural schools."

ARIZONA

Instruction of Bilingual Children, one of the numerous bulletins which comprise the State Course of Study for Elementary Schools of Arizona, states that "instruction of bilingual children is a far reaching problem in Arizona, as it touches most of the schools in the state." The same is true of many federal schools throughout Indian country.

The **Biennial Report of the State Superintendent of Public Instruction,** 1935, says that "an age-grade distribution of pupils of the State of Arizona shows that approximately thirty-five percent of the pupils of the elementary schools are over age. Many of them are as much as two or three years over age." Indian schools have long faced the pupil difficulties which arise and continue for years after the non-English speaking child enters school. Supervisors and teachers have striven to set up realizable goals and standards for such pupils, and are continuing work along these lines.

The authors of **Instruction of Bilingual Children** are frank in admitting that their suggestions are designed to *start the ball rolling* toward the solution of the complex problem of developing a suitable course of study for the non-English speaker. Previous bulletins of the Arizona State Department of Education have been planned primarily for the child from the average good home and "the activities suggested in them are based upon an assumption of . . . ability to speak English." The existence of the bulletin under discussion is justified by the fact that "emphasis on various phases of the curriculum may appropriately differ" for children from homes where English is the common language and for those from homes where English is seldom or never spoken. "Educational policies of today are greatly influenced by recognition of the fact that fundamental differences exist among American children . . . and by the fact that, for instance, the needs, interests, abilities and future outlook of the members of one eighth grade class may be very different from those of another eighth grade class only a few miles away. . . . Some experiences are needed by the one group and not by the other. . . . The child should have many first-hand experiences in school and much opportunity to hear and speak English. . . . He must have time and much practice to learn a new language well enough for any practical use. . . . There is more chance of success if the school program includes a wide variety of activities such as dramatization, excursions, club work, student government . . . gardening, care of pets. . . . Children show an interest in many types of activities. . . . Their interests may be hard to discover because of reticence, lack of means of expression, imperfect understanding, or because the material offered does not relate closely enough to what the child already knows. . . . If a child studies about rabbits, he should be given first-hand experience with rabbits. If he can care for a pet, build a cage which meets the rabbit's needs for protection and comfort, learn how to feed it properly and keep its quarters clean, he will develop an understanding of real value which will help him to get the meaning of a wide range of ideas about related subjects."

The bulletin continues, "In the past, school programs have presented many concepts too mature for the understanding of young children. . . . It is commonly recognized that traditional standards" of achievement for American children "are not wholly sound. To apply these standards to children for whom they were never intended makes them even less suitable. In order to be acceptable, standards must suit the abilities of the children whose work is to be judged, and must be in accord with the point of view from which the education of these children is being conducted. No suitable standards for children from homes in which language and customs are different from those of English speaking homes have ever been established." Since 1939, when this bulletin was issued, Indian schools—especially in the Pueblo and the Navaho jurisdictions—have directed efforts toward the development of such standards.

The bulletin states further that "The school may set standards in accordance with its local setup. . . . Standards are difficult to determine because we purpose in terms of making the best of personal abilities, of becoming good citizens rather than in terms of definite accomplishment in subject matter. . . . We cannot say that at the end of six weeks a child should have learned a given amount, or at the end of four years he shall have read a given number of books. . . . The most important standard that we can set is honest effort—that the child do the best he is capable of doing. . . . The next consideration is that he attain in the various tool subjects the ability requisite to actual life demands."

The bulletin points out that where parents "fail to use English in their home life" it is a symptom of a condition which has even a more important influence, that is, "they also cling to customs and tradition which are at variance with the American norm." The child is "finding his way from one culture to another . . . struggling with antagonistic forces if his school environment and his home surroundings differ too widely and if either is too insistent in its demands upon him."

The language problem "calls for special techniques on the part of both child and teacher. Supplementing the experience background of the child . . . to an extent that will make his school curriculum meaningful is a problem even more fundamental and difficult than that of language. . . . Progress is affected by the dominant factor, cultural inheritance." The child "comes more nearly to resemble" the typical public school child "in his interests, abilities and achievements as his home environment becomes more like that of the Anglo child. At some point in his advance he merges into the group for whom the other Arizona curriculum bulletins have been prepared." This bulletin outlines procedures for use with the non-English-speaking child "through the stages of progress in which his educational needs are markedly different" from those of children from English-speaking homes.

Detailed suggestions are presented for treatment of the language arts. Suitable units for social sciences and nature study are outlined because of their close relationship to the phases previously discussed and because of the importance of these subjects in the lives of the group. Some of the proposed long-time activities or projects are called, The Home, The Farm, The Community, A Garden, Post Office, Flour Mill, Store and Market.

"The special aspects which the problem of arithmetic learning presents to the bilingual group are closely related to those of language learning. Most bilingual children have standard ability to acquire skill in arithmetic fundamentals. Problem reading and arithmetical reasoning depend upon an understanding of the concepts involved, a command of English relating to them, and upon the specific reading ability needed. The development of these accomplishments requires many details of learning."

"Art and music are of great importance in the curriculum of bilingual children because they offer good opportunities to unite groups, wide possibilities to add to the joy of living and provide a means of creative expression to children who are handicapped by limited ability to put ideas into words. . . . The teacher of bilingual children should emphasize self expression . . . as an approach to development of needed skills. . . . The learning of techniques should be subordinated. Learning to play simple instruments, as harmonica, ukelele, guitar, gives the bilingual child great joy and is an accomplishment which he can constantly use outside of school."

All study groups which have been concerned with the problem of teaching the non-English-speaking child, stress the importance of school people being open-minded and making a sincere effort to free themselves from prejudice, of their becoming acquainted with the cultural background of the child together with his family history and with conditions in the community from which the pupil comes, and keeping abreast of the progress of educational theory and practice.

Elementary Teaching Guide—1948*

For the first time since 1932, the State Department of Public Instruction for Arizona issued a revised guide for elementary schools. This new bulletin entitled "Teaching Guide and Philosophy of Education for Elementary Schools of Arizona, Bulletin Number One, 1948," puts the public schools of Arizona on record as supporting the same point of view and practices as have been pursued for a number of years in the government Indian schools.

Individual differences: On page eight is an excellent photograph showing a desirable classroom arrangement of furniture and pupil activity. In the front corner of the room, a group of eight children is sitting in chairs in a semi-circle, working with the teacher on a reading chart. At one end of the room, four children are seated at a table reading books. In one corner, two children are standing at an easel and drawing large pictures. The remaining children are at pupil desks doing different things. Some are coloring; some are reading. Walls and bulletin boards are decorated with a variety of interesting displays. All these things are standard practice in our Indian schools in meeting individual differences by organizing the class into various small groups.

Arts: "Good school programs with excellent provisions in health, music, art, and industrial arts can and should be provided in many of our schools. This situation offers both an opportunity and a challenge to the administrators and the teachers of these schools." p. 9.

Language handicaps: "For the state as a whole almost one-third of the elementary school pupils come from homes where a foreign language is used by the parents. This requires that many first grade pupils be taught to understand and speak English before effective school work can be carried on. . . . Effective reading requires that experience in the form of spoken words be used to acquire skill in the use of printed and written symbols of thought. Children who come to school without command of the English language will require two years to do the work of the usual first grade. Some will be hindered in later grades because of the initial language handicap." p. 11.

This position concurs with the experience and practice in the government schools.

Units: Because of the high rate of migrancy in Arizona, a condition which prevails among many Indian tribes also, the State authorities urge recognition of this problem.

"Migrancy suggests specific attainments to be secured at the end of definite periods of time. A unit, project, or activity which runs for a year or a half-year may conceivably prove a handicap for transferring pupils, whether entering or leaving. Shorter units may be, at times, more usable and more satisfactory." p. 14.

Small Classes: "The large numbers of migrant pupils and of those with language difficulties imply the need for smaller class groups. It is a far more difficult task to teach twenty-five pupils; a third of whom are migrants, than to teach thirty-five pupils all of whom are present during the entire school year." p. 14.

Drop-outs: A table of enrollments at various ages for 1948, shows that only 33 per cent as many children are in public school at the age of 17 as there are in school at the age of six. In short, this culture problem is not unique among Indian schools, although great progress is being made in the holding power of the government schools

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*This review was prepared by George A. Boyce, Director of Navaho Schools.

Realistic Schooling: "Since the school is but one agency for the education of individuals, it follows that the educative experiences of the school should be closely integrated with the experience of living outside of schools. Schools, to contribute effectively to the growth and development of socially desirable personalities, must be realistic and lifelike. They must be geared to the present day needs and interests of young people and continually adapted to the changing socio-economic order." p. 15.

Objectives Not Static: "The democratic way of life is a developing concept rather than a static one, and its meaning and values need to be continuously re-examined and overhauled. Thus, the aims and objectives of education in a democratic society are not fixed ends to be achieved, but rather, the **direction** in which individuals and society should continue to grow in their effort to achieve freedom and the good life under the democratic ideal." p. 15.

Modern Psychology: "The means by which the purposes and objectives will be met should utilize to the fullest extent possible, the principles of human motivation and learning developed through available research in psychology. In this connection it is fundamental (1) that pupils understand and accept the things they are expected to do in school, and (2) that the individual differences in interest and ability of pupils be fully recognized in the selection and organization of materials and activities for use in the classrooms." p. 16.

Primary Objectives Urged: "While large aims are inspirational to teachers it is essential that any unit or division have specific objectives to be achieved if the work is to be definite and realistic. . . . Our most vitalized instruction occurs when teaching is related to more or less immediate activities and needs.

"As the term suggests, secondary sources of objectives imply the use of objectives formulated and arranged by others besides the teacher herself. Objectives may be found in statements in books and in courses of study. This is quite common. . . . The use of secondary sources of objectives alone may readily provide for teaching which is academically respectable but which may be wide of the mark with respect to immediate pupil needs." p. 17.

Longer Work Year for Teachers: "Provision for an additional month or more of time apart from the teaching of classes might encourage the formulation of more functional objectives and more vital materials in the various schoolrooms of the state. Too often the classroom teaching during the regular school year leaves little time for constructive planning of objectives and content and detailed critical evaluation of the results of their use." p. 17.

Teach Tool Subjects Functionally: "Skill in the tool subjects, health, citizenship, and good use of leisure time are good objectives. When we teach percentage or fractions in arithmetic the results of such instruction are not ends in themselves. Understanding of the concepts of percentage and skill in their use are vital only insofar as these contribute to the individual's effectiveness in various life situations." p. 18.

Understandings and Habits: "Knowledge as a pupil outcome has been provided in our schools for years. It is an item which is easy to isolate; it is comparatively definite with regard to teaching and learning, and it lends itself very readily to measurement. However, the mere fact that items of knowledge may be readily isolated and differentiated tends toward the presentation and learning of facts as ends in themselves. Too, many relatively valueless facts may be learned without regard to their real meaning or their relationship and application to life use. For this reason **understanding** would be a better term . . .

"Habits, practices, abilities, and skills are worth while pupils outcomes to plan for. Fundamentally, they provide for the **application** of the knowledge and understanding which have been developed. The habit of good posture, of regular physical examinations, of effective care of the teeth, and of proper sleep are examples of such habits." p. 18.

Emotional Outcomes: "The atmosphere of the classroom, the attitude of the teacher, and the method of instruction will determine what outcomes of the emotional type will ensue. With certain teachers an interest in other groups, the ideal of justice, the attitude of tolerance, and an appreciation of the interdependence of various peoples will accrue from the study of the social sciences. With other teachers using largely similar materials entirely different results are secured. This type of pupil outcomes furnishes the drives for continued growth and study and determines largely the permanet value of the work of the school and of the individual teacher." p. 19.

Pupil Objectives: "It is quite obvious that in stating objectives pupil outcomes should be the major concern. The statement of aim should **not** be (a) to teach handwriting; or (b) to teach poetry. Rather one should develop with pupils (a) understanding of letter forms, of most effective handwriting materials, and of criteria for evaluating one's own handwriting; (b) skill in writing correct letter forms, in use and care of writing materials, and in evaluating and improving his own writing; and (c) a feeling of personal responsibility for rapid and legible writing and an ideal of effective performance. . . . Formulating objectives in terms of desired pupil outcomes should become a regular practice with all teachers." p. 19.

Integrated Subject-matter: "Integration of materials and experiences from different fields and areas is highly desirable. Such integration should, ideally, come as the result of the child's efforts and activities. It should not be merely a plan of organization of content and experiences prepared by the curriculum specialist or the textbook writer. It should come as the desirable end result of the efforts of teachers and pupils, especially pupils." p. 20.

Curriculum Determines Books Used: "In some schools and in certain subject-matter areas the textbooks in use determine the offerings of the individual school. . . . Courses of study with clear objectives and desirable content should first be prepared. Textbooks should be selected because they will aid in promoting and attaining the objectives set forth in a well prepared course." p. 21.

Daily Assignments Criticised: "A very common type of teaching organization is the daily lesson assignment-and-learning plan. The relationship of each day's work to that which precedes and that which follows is not clear to pupils. There is a tendency for the teacher to act as taskmaster . . . the motivation is often poor and some pupils remain largely mechanical lesson-learners. In this plan of teaching organization, integration is largely incidental and accidental." p. 23.

Functional, Experience Units Urged: "Functional subject matter units emphasize the selection of useful content. Pupils are encouraged to learn because of need, present or future (probably mostly future). The relation to life problems is indicated, various good sources of materials are used, and methods emphasize pupil thinking and application. . . .

"The immediate child experience unit begins with the selection of some immediate experience of the children which arises within the group. Either individual or group activities may be used. There is a large degree of pupil direction and control. Subject-matter lines are disregarded; integration of learning materials develops around major activities and problems. Self-control and creative endeavor by pupils are emphasized." p. 23.

Diverse Activities: "Activities have always been present in classrooms. The simple pupil activities of reading, writing, spelling, and computation have been used and will continue to be used in situations within and without the school. Other pupil activities which should be consciously used, because of their possibilities in pupil development and continued learning are planning, organizing observing, discussing, analyzing, interviewing, constructing, outlining, comparing, evaluating, thinking, generalizing, applying, and summarizing. . . .

"In teaching by units (or by any other plan) teachers and pupils must have access to many sources of materials besides the textbook. Reference books must be available. Auditory-visual aids to learning—maps, charts, objects, pictures, films, recordings, and school journeys—must be provided and used. One can not expect the best results in a narrowly restricted and highly artificial learning environment." p. 24.

Local Curriculum: "It is as impossible to make a program to fit the needs of every school, as it is impossible to buy a pair of shoes for a person one has never seen. Each teacher must accept this program as suggestive and from it develop a program that will provide opportunities to direct the learning experiences according to the interests, needs, and abilities of the group being taught." p. 30.

Flexible Grade Grouping: "Grouping implies taking the child where he is and helping him progress at the rate he is able to achieve success in learning. The plan of grouping should be FLEXIBLE so that a child may be moved from time to time as he progresses. He may be with one group for one type of instruction, and with different groups at other times according to his needs." p.30.

Quotations from the new Arizona Elementary Guide have been presented here rather fully to show the many points now urged by the State authorities for public schools which are identical to what has now been long practice in Indian schools.

COLORADO

The latest edition of the **Course of Study for Elementary Schools of Colorado** was issued in 1942. The foreword states that "there are incorporated new patterns for practices and new techniques based upon further scientific findings which have appeared since the former course was published" in 1936. "It has been the constant aim to make this course. . .meaningful and practical." The special committees of educators and the contributing lay citizens have placed stress upon practices designed to develop in children "understandings of social relationships," so that as "they practice the art of living with others in school and in the community, they may become better prepared to live in the social world of today and to take their place in the new world to be."

One of the primary values of a state course of study is that it provides a "pattern for common experiences which are necessary for common understandings among the citizens of the commonwealth. **It is not intended that this course of study shall supersede or take the place of a superior one already in use in any school.** . . . In each community . . . this course may be enriched and broadened in accordance with the local economic and social life." In any case "it remains for the teachers of Colorado to adapt this course to the needs of the communities in which they teach and to the children under their guidance. . . .Children, according to the suggested procedure, should have a part in helping to plan, carry out and evaluate their experiences in making this course a vital source of educational guidance. It is recommended . . .that teachers individually and in groups, whenever possible, study this course of study and plan for its most effective use."

The people responsible for the Colorado Course of Study for Elementary Schools believe that schools exist "for the purpose of guiding the development of the whole child —physically, mentally, socially and emotionally," a contrast with an earlier belief which held that the primary purpose of the elementary school was to make the pupil literate. Mention is made of the following opportunities which schools should provide: "growth and development of strong, healthy bodies, . . . an ever increasing degree of emotional stability, . . . understanding of and an appreciation for democracy as a way of living, . . . intelligent understanding of the natural and social environment, . . growth in the ability to live happily in a cooperative society, . . . mastery of those skills and abilities used frequently in life situations and those for which the need is crucial when it does arise, . . . development of individual interests and aptitudes." While the foregoing objectives are stated in broad terms, they aim fundamentally at the same kinds of outcomes which are stated more specifically in the primary objectives of Indian schools.

The course of study is divided into seven sections. The first six are: Language Arts, Social Studies, Physical Education, Science and Health, Arithmetic, and Fine Arts. The seventh section aims to give teachers help on special problems such as Teaching Bilingual Children, Unit Teaching, Guiding the Emotional Development of Children. "Although the content of the course is divided into these six major sections, it does not imply that each is to be taught in . . . isolation from the others. Each area has a definite contribution to make to the development of the child, but all are interrelated. . . . A good principle to follow, as a guide in this matter of correlation, is: 'In any educational activity, utilize those related experiences which fit naturally into the activity and which serve a useful purpose in furthering the objectives of the activity'."

The six divisions which deal with content material are all organized on the same pattern. The following headings from the social studies section are typical." (1) Why Social Studies Should be Taught (The contribution which social studies can make to the growth of the child); (2) How Social Studies Might Function in Other Activities (The relationship of social studies to the entire program); (3) The Program of Social Studies by Grades (including suggested outcomes, illustrative units, suggested activities and other aids for teaching); (4) Evaluating the Pupil's Work (Suggestions for evaluation in terms of desirable outcomes); (5) Suggested Adaptations of This Program for Schools Having Several Grades Taught by one Teacher; (6) Special Helps in Teaching Social Studies (Suggested methods and procedures); and (7) Professional Bibliography for Teachers."

The social studies represent those parts of learning which "deal mainly with the relation of man to social and natural environment." Social studies begin with an examination of "the child's own world, the home, and then progresses to the school, his new environment. Later he studies and participates in a bigger world with ever-widening horizons; the neighborhood, the community, the state and the world at large. This is developed through a progression of experiences over a period of eight years." In the daily programming there needs to be provision for "developing the broader units more adequately and for including more 'activities' in the program. **It isn't so much what individuals memorize as what they experience that has value."**

A comment on language arts holds good equally for all area of learning. "Pupils in each grade differ widely from each other in achievement. Good teaching increases, rather than decreases, these differences. The programs . . . are designed to meet the needs of pupils of average ability in a grade. It is to be expected that a few pupils in each grade will be unable to do all the work suggested for that grade. Others will be able to do much more . . . "

Under a number of the six major headings are to be found lists of the most common life situations in which a given type of learning is likely to be needed and used.

Suggestions for taking care of individual differences are made at many points. One such suggestion in regard to social studies is, "Children of lesser reading ability should be given easier materials and those of above-average ability more difficult materials to read. It is not necessary that all read the same thing. All may study different aspect of the same topic and then share the outcomes of their study with one another. Similarly in expressional work, some may be able to express themselves best through writing, some through painting, some through modeling with clay, and some through singing. Uniformity of expression is not possible or to be desired."

There are helps provided for the management of group activities. One is for the teachers to encourage the pupils to form interest groups. "Then, as members of these groups, they will collect and study material bearing on the problem and later share these with other groups through expressional activities, such as group reports, informal discussion, or dramatic interpretation," and they will participate in group responsibilities. "It is important that the teacher call the entire class together from time to time for sharing the results of study, for taking stock, and for making plans for renewed efforts toward the progress of the unit. . . . Some might be constructing something of wood, some modeling with clay, some writing a letter, some sewing, some painting, and some reading. . . . " Teachers are cautioned to begin group work with planning the period; then the various groups "secure their materials and go to work. The teacher acts as guide and gives assistance when needed. At the end of the period . . . work centers are put in order . . . and a few minutes are given over to sharing, evaluating and planning. Pupils display what they have accomplished, plans are made for the next activity period, materials are requested. and the success of the period is evaluated. This is done through informal discussion of how much was accomplished, how well the work centers were put in order, whether the groups interfered with others in any way, and how quickly pupils returned to their seats.

"Situations which involve numbers are met in almost every phase of daily living. . . . The major objective of past arithmetic instruction has been skill in computation. . . . Today the main purpose of arithmetic is to help the child understand and to adjust himself to his environment. This understanding cannot be gained in an arithmetic program which stresses only computation and ignores the informational, psychological, and sociological functions of numbers. . . . The course of study in arithmetic . . . has purposely been labeled, 'The Suggested Content.' Because a topic is listed in a given grade does not necessary mean that in all instances this is the proper time for introduction or completion. . . . Teachers should use the suggested content as a guide only. . . . It will be noted that . . . some topics have been stepped up to a higher grade level or completed in the next grade. . . . Investigations indicate that many number processes are taught before the child has sufficient maturity to understand their meaning. . . . It seems advisable to call attention to the fact that most all the new arithmetic text books have revised their placement of topics to meet the findings of recent research. Probably no text will coincide exactly with the suggested content given in this course but the resourceful teacher can make needed adaptation with little difficulty.

"We cannot use the the most ordinary objects of our daily living without being aware of line, color and design. . . . The public school affords the best opportunity for developing intelligent consumers of fine arts products . . . every child needs an emotional outlet. . . . Whether he ever becomes a poet, musician, or painter is immaterial. By gaining first-hand experience with the various media he is able to appreciate the fine workmanship of artists. . . . A general fine arts program discovers special aptitudes and makes provision for their encouragement.

"The daily recess and noon periods provide opportunities for free choice group games and play on outdoor apparatus. . . . However, neither of these periods satisfies the need for . . . a physical education instructional period. . . . In group recreational activities such as opportunities for developing courage, generosity, thoughtfulness, and fairness, muscular coordinations that respond readily to guidance at these ages should be developed. Fundamentals of rhythmic movement and of throwing and catching skills can be established which result in good motor habits upon which adolescent and adult performance can be reliably developed."

The suggestions provided as helps to teachers in dealing with bilingual children are similar to those already developed by Indian Service education personnel, particularly in schools on the Navaho Reservation, and to those found in the state courses of study for New Mexico, Arizona, Texas and California.

Noteworthy in the Colorado course of study are the many hints scattered throughout the volume which should be of help to teachers in explaining to parents and to the general lay public the changes which are operative in school procedure at the present time and the reasons for these changes.

FLORIDA

For a number of years the State Department of Education of Florida has been issuing a series of publications in a continuing program for improvement of instruction in the schools of that state. Florida recognizes the fact that schools are in need of a fundamental reorganization of curriculum, necessitating corresponding changes in teaching and administrative procedures. Two important bulletins are, **Ways to Better Instruction in Florida Schools,** 1939; and **A Guide to Improved Practices in Florida Elementary Schools,** 1940. This article is based on these bulletins.

From a report on the results of a study of New York youth graduating or leaving public schools, one Florida bulletin quotes, "The total impression of these boys and girls newly out of school is one of a group largely adrift, cut off from adult assistance, out of contact with any kind of helpful supervision. . . .Collectively the leaving pupils constitute a group schooled in academic facts, recognizing their rights as free citizens in a free country, but unconcerned about civic responsibility, and not awake even to the immediate and local problems and issues which will shortly confront them as citizens, taxpayers and voters." Florida educators explain that "one reason for this deplorable situation is that the schools of today scarcely touch upon the fundamental aspects of modern life. . . . In spite of the fact that schools now house all kinds of children from all kinds of homes, they still cling to a traditional curriculum of subjects originally planned for aristocrats and professional people. . . . Few of the school subjects . . . bear much direct relationship to the economic life of the community or the nation.

Each school a study group

"The very diversity of schools and communities in Florida makes it impossible for any planned curriculum to be applicable in its entirety to every community." Schools are urged to make the approach to educational problems "through total faculty planning and in terms of the many factors involved in the local situation. Much harm can come from adopting indiscriminately solutions and procedures used in other localities." It is expected that each school faculty will become a study group to examine problems faced by Florida people, the natural resources of the state, the complexities of the child's nature and needs, the nature of learning and the nature of the democratic ideal. As the faculty studies "the inter-relationships of these in the development of the individual," the group can "envision the school that must be erected to meet the challenge of such relationships."

General advice

The several statements which follow present ideas to be borne in mind by each local study group. "Everyone of the faculty should have a part in planning and developing every step involved. The . . . curriculum should be built around needs of pupils which arise in their interaction with the culture. The school should utilize problem situations in such a way as to promote ever increasing ability of pupils to think at the level of their maturation and intelligence . . . Teachers should utilize school activities as a means of giving children direct experience. . . . It seems desirable that instructional activities . . . be organized in large units In this way time is adequate for resolving the problems with which pupils are concerned. Opportunities for participation on the part of each . . . are greater. . . . Character development should permeate the entire school program. Since the organism is learning all the time, specific and unrelated lessons devoted to character education do little good. . . . The daily program should be flexible enough to allow modifications in daily planning. . . . Enrichment of the curriculum can come only to the degree that the courses offered are related to social living and to vital life situations. . . . Schools which are . . . failing to guide pupils in the process of relating the significance of the field of experience to democratic living, are likely to have a poverty-stricken curriculum in spite of the number of offerings. . . . It would not seem wise to require of all students 3 units in mathematics or 3 in science just because these were necessry to certain pupils who planned to enter certain colleges. . . . a faculty will evolve a program of school living wherein many of the problems to which special guidance must now be directed . . . will be solved. Such problems would be prevented, corrected or resolved by the very functioning of the school program. . . . The success of the school program should be judged in terms of changes in pupil behavior with reference to values implied in the democratic way of life. Skills are only a part of the attributes necessary for successful democratic living and should not receive disproportionate emphasis. . . . There was a time when the chief purpose of the school was the teaching of reading, writing and arithmetic. Today, . . . things formerly taught by the home and community must now be assumed by the school. . . . No textbook, however beautifully illustrated, logically organized and psychologically pitched to the level of the pupil, is sufficient for the finest teaching. Nothing can take the place of . . . first-hand experience; and no writer can take the place of the vital teacher in leading pupils to understanding relationships in terms of the immediate setting and in reference to individual differences of various members of the group."

Maturity

"Some six-year olds have the motor control of some nine year olds; some kindergarten pupils can sit still longer than some eighth graders; some boys have better development than some girls seven years older. . . . Children who are chronologically at the same age may vary from four to five years in maturity. . . . A child may be chronologically six years of age and show a mental age of five. . . . Because of the differences in the rate of mental maturation of individuals, experiences which are suited to several levels . . . should be provided, if the teacher wishes to promote optimum growth in each individual.

"The importance of direct experience in the learning process needs emphasis. First-hand contact with the actual things of life is extremely important. . . without such experiences, learning becomes mere verbalism. The most realistic experience an individual can have is the actual handling of an object, the observation of a process as an event, or experimentation with materials in creating . . . articles. . . . The wider the variety of situations with which the child has dealt . . ., the more likely he is to develop control over subsequent problem situations.

"The school represents the first organized instutition where the child must learn to adjust himself to the demands of the group." How well he develops the habits of being quiet while others are talking, being tolerant of others' ideas and actions, controlling his temper, etc., "will depend in part upon the kind of situations provided for learning them. . . . Individual differences are present in social growth as in physical and mental growth. . . . The achievement of maturity . . . requires a steady widening of this belonging from the family to play group, to the school class, to clubs and so on.

"The school can best be regarded as an extension of the home, as a place where the activities of the day are planned in large blocks of time. . . . There will be a time for group planning by pupils and teacher, a time for group activities, a time for direct instruction as the need arises, and a time when the teacher meets the needs of individual pupils through a personal touch."

Units help integrate

Integrated experiences "give many opportunities for the child to see that his learning and various activities of life are related to one another. . . . Units which are developed in the integrated phase of the program should be related to the problems of the child as he attempts to adjust himself to a complex society. . . . Units should not be thought of as something to be carried out following completion of routine work." The Experience Unit seems to possess certain advantages over other types, in that its relationship to each pupil "makes a unit . . . a particular experience for him, and makes it possible for a unit . . . to be a different experience for every child. . . . There is a complete harmony between a large experience unit of work and the learning process . . . units provided throughout the year need not include everything contained in the texts and other references. These are often so overloaded with facts and concepts unrelated to the child's needs that it is difficult for him to comprehend all the material contained in them." Several sample units are included. There is an explanation of the ways in which learning values may evolve from the unit. Possible activities and a culminating activity for each suggested unit are outlined.

A general center of interests is suggested for each grade level, for example, *Helping Each Other in the Community* for second grade; *Improving Life in Different Regions*, for fifth grade. From each general center of interest certain important elements are selected and for each of these a number of problems are listed for exploration by the classroom group. Related problems are clustered to form a unit of work.

Under each subject heading are discussed ways of promoting child growth, of developing the process of reflective thinking and the scientific method, of developing creative ability, of understanding use of the skills in real life situations.

Language arts

Fairly detailed suggestions are given for improving instruction in the language arts. "Formal, unrelated language work does not result in the acquisition of either desired skills or social values. . . . If the child is to establish appropriate attitudes toward self control and his relations to others, he will need guidance in participating more skillfully in language activities. In school he will need experiences with conversation, telephoning, group discussion, group planning, story telling, dramatization, reporting, speaking to large groups, social letters, business letters, forms, labels, titles, signs, announcements, notices, advertisements, directions, rules, memorizing, records, notes, diaries, reports, reviews, summaries, outlines, bibliographies, indexes, tables of content and title pages. . . . . The child will need these types of experiences both in and out of school and in connection with many activities which he will carry on as he participates in the present complex social order. . . . It is probably biologically impossible for each child in a grade to meet a certain level of achievement with regard to the mechanics of language. If it were possible . . . such an achievement would not give any guarantee of social development which is so necessary for effective living in a democracy."

The failures in reading, so common in the primary grades, are "brought about by putting children in a difficult reading situation before they are able to cope with it successfully. . . . Although teachers may realize the necessity for developing a readiness to read, parents often expect the children to begin formal reading on the first day of school. The . . . solution to this problem is . . . a long range educational program involving parents . . . to assist in building clear concepts regarding the reason for change in educational procedure.

"The pupil should be led to correct and clear expression rather than to become conscious regarding error. Where error hunting becomes a major objective it may produce a situation where the child will cling to simpler, immature sentences merely to avoid poor grades or a sense of failure."

Social studies

"Suggestions are offered . . . for selecting and using socializing experiences that may result in increased understanding and appreciation . . . concerning the world . . . and in the development of . . . responsibility to the group and to society. . . . . . The mere teaching of facts, whether accomplished through the text book method or through the activity program, has been ineffectual in developing in the child the understanding which will aid him in sensing relationships and in solving his own social problems." Charts of problems and situations are included to "serve as . . . guides for teachers in planning experience situations through which these problems can be solved. . . . Teacher-pupil planning for activities which will aid in the solution of the problem should promote a better understanding of it, develop pupil initiative in carrying out activities, and eliminate daily assignments prescribed by the teachers. . . . There will be times during group activities when situations will arise which will demand further explanation and will call for direct teaching. . . The teacher may further provide for the individual by organizing her class into smaller groups concerned with problems of varying difficulty."

Science

In the past elementary school science "tended to consist largely of superficial or sentimental nature study. . . . Later, the teaching of elementary science became concerned with grouping facts under large principles or generalization. . . . Recent trends . . . emphasize such values as . . . : the social meaning of scientific advance, the scientific attitude, and the contribution which science can make to every day living. . . . One of the very common generalizations of science states that plants and animals are interdependent. If the teacher merely gave this generalization to the child, it would . . . mean very little to the individual. . . . She will guide the pupil to discover principles . . . , in making investigations of his own; the *why* will become quite as important as the *what*. In a sense, every generalization in science which is meaningful will be caught rather than taught. . . . Even a simple group problem like caring for a pet will cut across many areas of science.

"The human resources of the community are often overlooked. Each community has people who could make a definite contribution to the science experiences of the children."

Arithmetic

"The trend today is toward the teaching of arithmetic in such a way as to help the child see meaning in number. . . . The teacher . . . will attempt to provide situations in which the child may come to an understanding of the social value of number and of the need for control over mathematical skills. . . . It is through the integrating of number experiences with the rest of the school curriculum that the child gets his best opportunity to think reflectively in terms of problem situations that are vital. . . . When number facts are present as something to be learned they may become drudgery; when they are discovered by the child himself, they take on added meaning and interest. . . . The life of the primary child abounds in opportunity for concrete number situations. . . .

"There is no reason for expecting a child to come unaided into an understanding of a number system which his remote ancestors require thousands of years to develop. . . . The suddeness of the transition from the concrete experience to abstract thinking is commonly a basic cause of confusion . . ., children jumping this gap and landing in a wilderness of unknown symbols and meaningless names. . . . Drill alone does not make for adequacy in dealing with situations involving number. . . . A use for number may arise at any time during the school day, and the teacher must be alert to take advantage of these situations at they occur.

"Since learning arithmetic is complicated by individual differences of pupils and by variations in groups and localities, there probably could never be a set curriculum for arithmetic. Even when research may have supplied far more information than is now available, no rigid standards or allocation of grade placement would be desirable."

The arts

"Lifelong enrichment of daily living, conscious improvement of surroundings, intelligent buying and appreciative listening are values which experiences in art and music should hold for every child. . . . It is not what the child contributes to art but what art does for the child that really matters. . . .

Ideas that are expressed through art or music may require a great deal of hard thinking. Graphic expression often requires more planning and ability to see clearly the idea . . . than would have been required had one decided to express the idea through oral language."

Health

"In recent years health education has been regarded as fundamental to any school program that assumes full responsibility for its share in the physical, mental, emotional and social life of the child. The emphasis has shifted from a formal, factual treatment to a point of view that recognizes healthful living as one of the major responsibilities of the school. . . . It is becoming increasingly clear that mere textbook learnings and parrot-like repetitions of health or safety slogans have little value.—A casual survey will reveal the discrepancy between what is known and what is actually practiced. . . . If the child is to maintain throughout his life desirable health habits and attitudes, these must be learned in a functional situation so that they will not be forgotten when he leaves the school. . . . An adequate background for healthful living may be provided in any type of school, in every classroom where teachers are alert to . . . the problem and willing to capitalize on every situation that arises."

A chapter, *A Growing Teacher and a Growing Faculty*, describes in detail four supervisory visits to a sixth grade classroom. Each sketch describes a higher level of of growth reached by the teacher between one visit and the next, as she moved from a teacher-dominated classroom situation to a child-society centered situation. The account is revealing as to the possibility of any teacher improving methods of dealing with children, and points out that "the progress made by an individual teacher is distinctly limited or accelerated by administrative policy, faculty planning and community understanding."

MINNESOTA

The Minnesota **Curriculum for Elementary Schools,** published in 1923, was revised in 1928. It was reprinted in 1943 for interim use until the new curriculum now being developed is ready for issue.

As far back as the 1928 revision the Minnesota curriculum was adding "new and appropriate materials of character and social worth of the greatest functional value," making such modifications as "combining into unified courses . . . subjects . . . having natural relationship," and accepting changes in material, methods of procedure and content to make for "better adaptation to child needs and more effective functioning in child life. . . . These modifications reflect the influence of . . . the results of research and investigation . . . ." These changes are only the "next tentative forward step for keeping the curriculum in harmony with advancing educational practices."

Education is defined as "the active adjustment of individuals one to another, to their environment and to the life of the world. . . The individual grows as an individual in the best sense only through participation in and adding to the efficiency of society. . . . Education should lead to an interest in life, all phases of life. Education which is not related to life, to its practicalities and to its beauties, is futile. . . . The success of a democracy depends not only upon the . . . knowledge and skills possessed by its citizens but also upon their attitudes and the ideals for which they stand."

In discussing the educative process, the Minnesota curriculum says, "The experiences of life as they come naturally in connection with the life of the individual furnish the most effective teaching. No other teaching would be necessary" were it not for the need of protecting the young against unsocial tendencies . . ., of selecting typical and representative experiences, since schools cannot cover the entire span of human endeavor; of evaluating and interpreting experiences; and of giving the pupil mastery over his environment.

"The school exists for the child. Child growth and effective social life provide the basis for all educational effort." The teacher must "minister to the needs of the child in the light of what he is and what he should be. . . . He needs to be encouraged to appropriate . . . the modes of social behavior, to accept responsibility for his acts and the quality of his work, and to develop the power of self-discipline . . . independent thinking and efficient cooperation." The teacher must know "the individual child and . . . appreciate the fact that education is not dead formalism but rather the active participation of children in life's activities."

The Minnesota curriculum divides life into three large aspects and regards "preparation for efficiency in these as objectives of education." These are: "A. Health: . . . physical vigor and sound health. B. Civic and Social Relations: . . . ideals and habits of cooperation in civic and social enterprises, . . . citizenship, moral and ethical character, and worthy home membership. C. Recreation: . . . enjoyment and enrichment of life . . . interests and means of recreation of value to all.

"It is the viewpoint here, that," although the obligation of imparting to pupils the skills in the Three Rs "rests on elementary education . . . it is not an objective *in the same sense* as are the three already named This is an objective *not on a par with, but* *merely preliminary* to efficiency in these main aspects of life. . . .

"There should be much in common between objectives of elementary and of secondary education. . . . The chief difference is the addition for the upper period of an objective relating to vocation. . . . There is . . . a consensus that the period intervening between elementary education and senior high school education should be characterized . . . as one of *guidance*," not for vocational training but for examining possibilities and for making tentative occupational choices.

"Life has been defined as a relay race in which each generation hands on its accumulated wisdom to the next. The function of the curriculum . . . is to communicate this wisdom and experience and so interpret it as to set the new generation running in the right direction. In thought and practice, however, the curriculum too often has been defined in terms of formal subject matter unrelated to the child's needs and interests or to life itself. . . . The interests, needs and capacities of children . . . should be the determining factor for the selection of content. . . . Pupil differences demand a wide range of adaptation of materials and activities. . . .

"Children differ widely in their traits of character, their interests, their needs, their levels of mental ability and their rates of learning and progress. . . . It is impossible, therefore, to teach all children in the same manner or to expect the same accomplishments of all or, even in all cases, to give the same content. . . .The curriculum must . . . be organized so as to provide a basic common training for all and still be so flexible as to provide supplementary material of an optional nature for the more efficient."

Some statements about character education follow. "Individuals are not abstractly honest, or neat or courteous. They are honest in definite situations. . . . Character education consists not in philosophizing over generalities but in training children to make proper ethical responses to situations presented in school life." Certain general tendencies of children are discussed and it is suggested that teachers study "some of the facts of the child's inborn nature" as a basis for character education. "Small children have an impulse to look at, to taste, to examine things that are in the least unfamiliar to them. As they grow older, they show a tendency to experiment, to take things apart, and put them together again." The child "wants to do things. . . . Educators are realizing that education comes through the 'muscles,' and motor activities are being given a larger place in our schools." The child "wants the approval of his teacher and . . . later it is the approval of his mates . . . that means most to him . . . . Play has always been natural to children, but we are realizing more and more the important part is has in their education." A very active period is that between the ages of eight and twelve, and the child "likes to test his mental as well as his physical powers . . . in . . . games that exercise thought power." A statement quoted from the **Fourth Yearbook of the Department of Superintendents, N. E. A.** sums up the matter, "The most effective moral training can be given when the child engages in purposeful activities."

The Project-Problem method is recommended to teachers. "Such school experiences are vastly more like the experiences of real life than merely sitting quietly and memorizing facts from a text book. If education is to prepare for life, it must relate itself closely to the great undertakings of the past and the equally great enterprises of the present." The child must start with "what he knows, with his own experience; but, as he proceeds, his experiences grow, his world gets larger and he is able to meet more and more difficult situations. . . . Upon such school work as this, the child of his own free will brings to bear all of his ambitions and effort. His power of initiative is aroused and also his self-determination. He learns to use all the knowledge that he has acquired and to economize time and avoid waste by organizing this knowledge. He sees the necessity for more knowledge, the need for mastery of the fundamental processes and, with the realization of this need, he has a real purpose in applying himself to the mechanics of reading, arithmetical computation and the elements of oral and written language. Many projects or problems bring about group work, ... The group spirit gives new life to the interest of each member, and the common effort arouses the sympathy and interest of each child in the group activities and the desire to accept his share in the common undertaking. . . . The aim of this method is to make conditions as much as possible like those in which work outside school is carried on. . . . When the child's best effort is called forth and expended upon some project . . . ,there will be no great temptation to whisper, to write 'notes,' to make . . . disturbing noises, to play truant . . ."

The elementary curriculum is organized into the fields of Arithmetic; English—reading, library, language, spelling, handwriting, Social studies—history, citizenship; Arts—art and industrial arts, music; Science—geography, environment in relation to human welfare, elementary agriculture (seventh and eighth grades), health education, physical education.

Arithmetic

In formulating the arithmetic work consideration was given to the "needs of the child as a member of a social group; the needs and demands of the industrial and commercial world in which arithmetic processes are employed. . . . In the first two grades the child should be getting clear, correct ideas of number and quantity through play, games and construction work. . . . Drill should be organized to secure participation of all of the pupils, all individually or in groups working on their own specific needs. There should be little, if any, concert work. . . . The aim should be to teach the child to analyze and solve correctly . . . problems that . . . appy the arithmetic processes he has learned to life situctions." A text book is not used by pupils until third grade.

Some pupil activities for second grade through sixth are: playing store, earning and spending money, assisting in weighing pupils, making the garden, doing farm work, planning a trip, keeping records, planning cost of school lunch, making out bills, drawing maps to scale, keeping a boy's cash account, planning a candy sale, figuring cost of making and putting up a radio set.

Reading

Recommendations are based on "studies of society to select subject matter and method with respect to their utility," and on "studies of the child to discover his interests and to help base teaching on the laws of learning."

The "period of preparation for reading" is recognized as an important one. "This period includes the preschool age, the kindergarten and . . . part of the first grade." For this period teachers are urged to provide opportunities for doll play representing home activities; activities related to holidays; nature study actitities—filling an aquarium, making a snowman, gathering nuts and flowers; making collections; planting gardens; taking trips; . . . using a book and picture center; keeping a bulletin board. Grades two and three are considered together as a period in reading growth. Suggested are "wide reading in connection with classroom activities. . . .;independent reading to insure wise use of leisure and to develop individual interest." Grades four, five and six are grouped together as another period in reading growth. Here pupils should have opportunities for "wide reading experience and to cultivate important habits and tastes. . . . Silent reading becomes increasingly important during this period. . . .

"Oral language for most people is practically the only language used. For this reason it is of first importance in our schools, and deserving of a far larger share of time-allotment than it generally receives, . . ." During the first grade "all the language time should be given to oral language," and for grades two, three and four it is recommended that only one-fifth of the time be used for written work. Conversation, story telling and dramatization are to be emphasized.

Social Studies

Social studies are defined as "those devoted to the relation . . . of individuals with one another or with groups. These studies comprise history and citizenship. . . . The special field of history is to teach the child how social ideals have developed. The special field of citizenship is to teach the child his relationship with those institutions through which these ideals function. . . . Many correlations should be made."

The content of the first three grades is organized around control themes such as *Holidays, The Home Community Activities, Primitive Life, Pastoral and Early Agricultural Life.* Units of work are outlined. "Simple dramatization should be used to make historical material vivid and real to the children . . . The history for fourth and fifth grades presented chiefly as biographical stories, seek to give the boys and girls a series of pictures of events in American history. . . . Emphasis should be . . . upon the achievements of these men and women; upon their courage, fidelity and patriotism; and upon the debt which the rising generation owes to the men of the past."

Arts

"Provision is made for a close correlation between art and industrial arts courses for grades from one through six in this curriculum. . . . Art has a place in the elementary curriculum that provision may be made for growth in expression through the use of materials. . . . The present generation lives in an industrial age and although not all are producers in the field of industry all are consumers of the products of industry. To live effectively . . . requires that each citizen have some acquaintance with the available sources of raw materials, the processes of industry which change these raw materials into usable products, and the standards of excellence in finished products. . . .

"The study of industrial arts in the elementary school contributes to the development of this desired knowledge. . . . Perhaps no subject in the curriculum relates so naturally to . . . other subjects of the curriculum as does industrial arts. The study of the available sources of raw materials . . .relates to nature study and geography; a study of the gradual development of industry through the invention of better tools, machines and processes relates to history; a study of the changes brought about in raw materials to meet man's growing need . . . relates especially to elementary science and health."

Suggestions for industrial arts for seventh and eighth grade girls include units of work on *Housekeeping,* the *Bedroom,* and *Personal Care.* For both boys and girls of these grades proposed units on *Family Festivals, Food and Health, Child Development,* and for boys of these junior high school years the curriculum includes study of where industrial products come from and how industrial products are produced. Many actual construction activities are listed.

Science

"The function of geography is to describe and explain the relationship between man and his natural enviroment" which includes "soil, climate, minerals, native plants and animal life, surface and underground waters, land forms and their slopes, areas and location. The environment is not studied as an isolated fact but only as man relates his various activities to it: gettingfood, clothing or shelter, . . . farming, logging and lumbering, mining, hunting, trapping and fishing, transportation, manufacturing, commerce and recreation. . . . In lowergrades, the relationships must be very simple. As the work advances, it assumes more and more the economic view; **land utilization becomes the very core of the subject."**

Environment in relation to human welfare deals with "the adjustment of the individual to the world in which he lives," and stresses preparation for life in "an environmentwhich differs quite radically from that of the past. The introduction of new insect pests,. . . the improvement of plants, and new discoveries in science . . . bring each generation new problems, new opportunities and new responsibilities. . . . Environment in relation to human welfare correlates naturally with many aspects of geography, reading, history, industrial arts and health education."

Grades one and two are "primarily a period of directed observation; grades three and four, primarily a period of original investigation supplemented by simple reading and of identification of facts; grades five and six primarily a period of interpretation, classification, establishment of relationships, . . . drawing of conclusions . . ."

The work in agriculture is planned for both boys and girls of seventh and eighth grades. "In a state whose interests are predominantly agricultural, no curriculum for the education of youth is complete unless it gives attention to problems of this one of the nation's biggest industries. The procedure for administering the work will depend somewhat upon the class of school, the enrollment and the environment. To meet these conditions the course is flexibly organized."

Health education in primary grades centers on "the development of personal health habits in school, home, playground and community." In the intermediate grades it stresses "the practice of health habits by children in relation to others," and the upper grades deal with personal health habits "in relation to the responsibility of the individual for participating in the health work of the state and nation."

Numerous trends, now firmly established in today's state courses of study, as well as in Indian educational policy, are implicit in this 1928 revision of the Minnesota curriculum, now nearly twenty years old. The forthcoming curriculum of this state is eagerly awaited, and it can be expected that it will still more closely parallel the curricula which are being developed at schools throughout the United States Indian Service.

NEBRASKA

The **Course of Study for the Elementary Schools of Nebraska,** issued in 1929, continued to be revised between that date and 1936 when the present edition appeared. It was reprinted in 1941.

The State Department of Public Instruction affirms that the purpose of the volume is "to offer suggested courses which will prove helpful as guides," and may assist "those schools working on local curriculum construction. . . .A curriculum cannot remain static" and for this reason "it should be considered tentative in nature. . . . It has been the purpose to provide for flexibility in this course so that the teacher may adapt it to her school. The materials of this course have been organized particularly for the rural schools."

This course of study "includes not only essential facts, principles and processes to be learned, and appreciations to be developed, but it has been enriched by suggested activities. The school work should relate the child to his environment and activities in such a way that he will work willingly and enthusiastically, and with a well defined purpose. . . .

"We believe that education is doing its best only when it helps people to succeed. . . . We need to turn our attention away from the failures that we observe in the classroom to the causes of failure. . . . Assignments may be adapted to the . . . ability of the pupils. The minimum assignment, the average assignment, and the maximum assignment are means by which one may adapt the work to pupils of varying ability."

Much of the course has been organized into units of work. A unit may be "a topic, . . . a generalization, . . . a significant phase of environment or development, or, from the standpoint of the child, it may be based upon the child's interests, purposes, or needs. . . .

"An activity has been defined as purposeful endeavor which is rich in the possibilities for growth of the child." Throughout the nearly 600 pages of the volume lists of activities appear at frequent intervals. They are classified in such ways that "the work of the school may be integrated . . . and not thought of as distinct subject fields." Sometimes they are classified as to purpose, for instance, *Activities That Will Stimulate an Interest in Community Life.* Sometimes they appear under the heading, *Teaching Procedures.* Correlation is stressed as, when under *Written English,* we find the suggested activity, "making booklets in connection with nature, science, health and social studies; or under *Oral English* that of "calling a produce dealer to learn the price of eggs"; or in sixth grade arithmetic the activity of "making . . . book cases from heavy packing cases," or for seventh and eighth year arithmetic, "participation in a school banking project." Sometimes the caption *Group Activities* is used, and the value of children working together in small groups is recognized. A few of the many group activities suggested are: "Making of the schoolroom a model of the interior of a colonial kitchen" in order to give reality to the seventh and eighth grade history unit, *The Thirteen Colonies;* or "playing restaurant" with a primary grades unit on *Community Life;* or "Creating a museum for the preservation of historical material of Nebraska" as part of a sixth grade unit, *Local History;* or "Making a collection of soils in bottles" in connection with the seventh and eighth grade work in *Agriculture and Geography of Nebraska;*" or "Making safety signs for homes and school grounds" for the study of grades five to eighth of *Safety in the Home and at School*.

The Art Course of Study is developed to integrate with the different parts of the total curriculum. "Drawing should not be taught as an isolated subject but should be a part of the activity program carried on in other subjects." Examples of such related art activities are: "Making illustrations of different farm activities as man milking the cows, the farmer harvesting the crop, the farmer plowing, the chicken yard, picking apples, the grocery store where some of the farm products are sold." This activity would be associated with a *Fall and Harvest* unit for grades one to four. "Constructing an Indian wigwam from cloth or paper" would be done while a fourth grade unit on *The Indians* is in progress. To accompany fifth grade work in *American Exploration and Settlement* the art course suggests such activities as "creating an orginal design for a quilt or rug . . . sketching a pioneer church and circuit rider . . . carving boats from wood, using muslin for sails, and . . . collecting and mounting illustrations of lighting fixtures, candles, shades and lamps."

The alternation and combination of classes plan is advocated for rural schools in Nebraska, the extent to which it is carried out depending upon the size of the school and the size of the classes. For each of the subject matter areas certain units are recommended for the *odd year* and others for the *even year*. Teachers in the Indian Service who have more than one class in a single classroom are urged to develop different programs for alternate years.

In language work "the effort should be to train the pupil's tongue and fingers to a fluent use of language. Emphasis should be upon the doing. . . . For convenience the activities are organized under certain topics. This does not mean that all conversational activities should be given consecutively. The work may be organized according to the needs, interests and experiences of the pupils. Some of the suggested activities may not be suitable. The teacher should feel free to substitute others." For the first grade teacher there is the suggestion that "there is greater need for oral English than for written English in this grade." The second grade teacher is reminded that "the function of the school . . . is to provide abundant and varied experiences where conversation, or appreciation of ideas, is a natural part of the activity; to center instruction about units of social interest and experiences; to stimulate language activities by the social situations which a child will meet, both in and out of school; . . . to provide opportunity for free, happy spontaneous expression of ideas and emotions under comfortable, happy social relations and conditions."

In preparing the course in arithmetic "the child is recognized as the center of interest. . . . The child's present life and the child's future must be considered. . . . What to teach should be decided by as wise adults as are available for the task who will base their decisions as far as possible upon the available body of objective scientific data. How to teach should be based upon a virile psychology of learning . . . not, on the one hand, running to seed . . . on dead tasks for the task's sake; and not, on the other hand . . . becoming concerned only with the factor of interest. . . . There must be no retreat from the position that felt need must be utilized, . . . tasks be made significant, that the sustaining effects of interest be earnestly sought and capitalized. Arithmetic should give to the child the power to think in numerical situations, an understanding of business transactions, an appreciation of the value of thrift in the relation of saving to character education, and a discrimination in judging investments. . . . In the first grade it is most important to give the pupils the mastery of certain reading skills. For this reason it does not seem advisable to require formal work in arithmetic, . . . children may read . . . page numbers in the primers at the time they are learning to read. Children like to count. The number work in the first grade should be taught in connection with objects until the meaning of number is understood. . . . Begin with real experiences, then pass on to work with concrete objects at hand," later working with "concrete objects not present with which the children are familiar," and finally at long last deal with "abstract numbers."

Some of the stated aims of the Social Studies Program are: "to develop the desire and habit of doing an honest day's work . . . and of . . . assuming one's share of responsibility; to . . . understand the rights of others as well as one's own rights; to develop the ability to participate constructively in a social group for its greater good; to develop one's interests . . . and through these to enrich the leisure time of one's self and others; . . . to develop a critical attitude and also a spirit of . . . open mindedness toward what one reads, hears or sees; to appreciate the importance of the conservation of all human and material resources." Centers of interest are named for the different age levels. Beginning with the third grade the units of work are organized around concepts of history, civics and geography. "History is SOCIETY'S memory," and it "searches for the TRUTH. . . . History leads the citizen to see and attempt to solve the PROBLEMS of his time; giving him a vision of a better society for which to strive. . . . The present should be used to illustrate the past and the past to explain the present."

The course in geography is planned to be flexible and individual. . . . "A time allotment is suggested for each unit, but . . . is in no sense arbitrary. Some of the units may have such interest for the group that they will demand more time for their investigation." What is said about geography units would be basically true of any good unit of work. "*Less ground* is covered by the unit plan but you have a much greater opportunity to enrich each topic by a *wealth of detail,* thus intensifying the impressions which the children receive." Each unit should develop the child's "powers of observation, widen his sympathies and increase his appreciation of his own or his neighbors environment. . . . The study of each unit should be so engrossing that it will *get into the talk of the community.* The children should interview people of the community who are particularly well informed about any phase of the unit being studied. They may write letters to the 'Chamber of Commerce' in certain cities, to school children in our own or other lands asking for information. . . . Remember that the text book gives . . . part of the material needed for this unit study. Master it but do not depend on it wholly. . . . Much opportunity should be given for individual reports and for small group activity. . . . Don't hurry the study of any unit. Remember that it takes time to 'ripen' impressions. . . . Most children need to learn a new way to think about facts. They should not be asked to learn a fact for the fact's sake, but for a felt need. . . . The teacher of geography helps the child to discover his world and its peoples . . . to get some understanding of the relationship between man's activities and his geographical environment."

For seventh and eighth grades two enrichment units in geography are proposed. One is *Survey of Industries,* and the other *A Survey of Leading Countries.* Together they are called *A Comparative Study of the World.* The aims are to get "a new view of the interdependence of nations, to discover . . . principles controlling the production, manufacturing and distribution of the world's most important commodities . . .

There are ten units of work under the broad designation of *Agriculture and Geography of Nebraska* for seventh and eighth grades. These units are intended to give the pupil "a picture of the development of the state from a wild, unsettled virgin territory" and to create "a regard for the hardihood, bravery, and fixed purpose of the western pioneers. . . .

"Nebraska is essentially an agricultural state. . . . Rural boys and girls are more interested in studying real farming problems, improved practices on the farm, information about the state and federal agencies which render service to the farmer, and the relations of farmers with people in other occupations than about agriculture from the pages of a book. . . . Many rural school teachers have been reared in town," but if they know something about agriculture and elementary science, "any teacher will be able to succeed if she is willing to study the problem and learn while she lives in the country. . . . The teacher must think of agriculture as an achievement and as an occupation which takes the time and attention of the entire rural family. Certain activities are carried on during different periods of the year. This course of study is based on these activities. The teacher must think of agriculture in terms of problems . . . every farmer must solve. . . . Many lessons may be taught from specimens taken from the fields, orchard or garden. . . . Trips to a nearby farm may be made to study animals or buildings. . . . The teacher should lose no opportunity to study the object or activity itself, rather than to read and then talk about it.

"Schools may find it possible to organize agriculture clubs in their neighborhood. If a Corn, Pig, or Calf Club were organized, it would be possible to devote more time to other phases of agriculture and add practical experiences." Courses of study of other states which like Nebraska have large agricultural acreage also suggest plans whereby boys and girls may have some actual experience with crops and livestock. Indian Service schools have been able pretty generally to realize this objective because in contrast to public schools—both the dayschools and the boarding schools have enough land around them so that gardens, field crops and livestock can be raised and cared for as an integral part of the educational program. Curricula for Indian schools in rural areas provide for first hand experiences in these fields, as well as for theoretical subject matter.

Character Education has as its aim to emphasize "common honesty, morality, courtesy, obedience to law, respect for the national flag, the Constitution of the United States and the State of Nebraska, respect for parents and home, the dignity and necessity for honest labor and other lessons of a steadying influence, which tend to develop an upright and desirable citizenry." The State Department of Public Instruction has prepared bulletins about the Knighthood of Youth Clubs, as sponsored by the National Child Welfare Association, and teachers are urged to use these clubs as a means of character education. The club program provides for activities for club members, for learning to "assume responsibility . . . for consultation with individual pupils . . . for happy natural experiences . . . so that they will function for better discipline. . . . In the club plan, the strong incentive to do right is the approval of the social gallery which through the club includes the school, home and community. . . . We are more concerned today about the child's social attitudes, his emotions and conduct. We are less ardent to inflict upon him superficial indoctrination. We want socialized citizens and not mere adding machines and phonograph records. . . . Real character growth comes in proportion as either children or adults face their own problems frankly, predict consequences, make their decisions and in practice suffer the consequences." This last statement is quoted from G. B. Watson's **The Project Method,** Y. M. C. A. Forum Bulletin, March 1924.

"The school club should be organized as a regular part of the school program."

Health education, safety, and physical education are provided for in a series of units of work in all grades from one through eight. Very considerable attention is given to narcotics, with a unit called, *Harmful Things for the Body* for use in grades one, two and three; a unit on *Alcohol, Nicotine and Opium Derivatives* for grades four, five and six; and one called *Nature and Effects of Narcotics* for seventh and eighth grades. An unusually large amount of material has been assembled on this subject, together with suggestions as to content, actual stories to be read, teaching procedures and pupil activities.

Nebraska approves of local curriculum construction, of integrating different subject matter areas, of character education, of flexibility of method to meet individual needs, of learning through a variety of activities, of organizing the class into small work groups. The entire staff at many Indian schools is meeting regularly to work on the development of a curriculum for the school;

summer schools and supervisors provide guidance. Teachers in Indian schools are encouraged to group the work of a given year around a central integrative theme. Indian school curricula provide for the development of habits and attitudes through group activities. Teachers are expected to make any provisions necessary to insure individual pupil progress. Indian education accepts as desirable the use of varied learning activities requiring the manipulation of many kinds of materials, tools and implements. Indian Service teachers are urged to make opportunities for children to work together in small groups rather than to attempt to teach them *en masse*.

NEVADA

The 1938 issue of the **State of Nevada Course of Study for the Elementary Grades** was originally issued in mimeographed form two years earlier. The material was sent to many schools in the state and teachers were invited and urged to make criticisms of the work. The present document includes many suggestions received. Nevada teachers, like those in the Indian Service, are expected to participate actively in developing the course of study for their schools.

Curriculum flexible

As evidence that material in the Nevada elementary state course of study is intended to be flexible are these statements: "The subject matter contained herein is more suggestive than mandatory. While . . . standards of accomplishment are desirable and necessary, there is no wish to . . . reduce all children in our schools to a single pattern of knowledge. . . . Genuine interest in the community, the people, and a community spirit which results in activities of real service to the community are irresistable assets to any education. . . . Education is more effective when it deals with everyday living." These might be compared to an Indian Service statement of policy which reads, "Teachers are expected to find within the environment much of the material for their education program."

To indicate principles to which the Nevada state education authorities subscribe the course of study quotes phrases from the Creed of the teachers of the Francis W. Parker School of Chicago: "Self activated work causes the greatest gain to pupils. . . . Training in initiative is the child's greatest need. . . . Freedom with balancing responsibility is the best condition for moral and intellectual growth. . . . Real experience with actual material is an essential of learning. . . . Opportunity for varied expression is necessary for right education. . . . For purposes of development, children must be treated as individuals and not as a group. . . . One of the most effective and wholesome motives is the social motive."

Activities suggested by environment

Other suggestions to teachers are, "The task of the teacher is to direct and stimulate the children in activities of learning that are made possible by the elements of which their environment is composed. . . . The content material of any single text book or school subject must not be pursued in isolation. The teacher should be familiar with the theory and practice of correlation, and should seek to link together the items of all learning material into one unified and complete whole"

Commenting on the more than thirty courses in the elementary curriculum and the multitude of short daily recitations which they call for in the one room school, the Nevada elementary course of study says, "Instruction, drill and the stimulation of pupil self-activity are crowded out, and the teacher becomes a mere hearer of recitations. Combinations, alterations and correlation will . . . result in more efficient teaching. . . . From this heterogeneous mixture of subject matter, let us draw two guiding principles of education and call them our fundamental mottoes: 1. To teach the child how to live; 2. To teach the child to earn a living."

Aids in learning to read

Suggested as aids to children in learning to read are such activities as, "Conversation about home activities, telling stories about pets and toys, playing a variety of games, taking excursions, looking at picture books and talking about them, dramatizing stories, labeling objects, matching things. . . . We must consider the harm which may later come to a child's nervous system, his health and his mental attitude in general, if too much reading is forced upon him before he is ready." It is proposed that special groups be formed to provide a place for children who are of regular chronological age but who are "immature or not up to reading-readiness age, or who have language, social or other handicaps which prevent them from progressing regularly, or who enter school late, or who have been kept out a great deal because of illness or other causes."

For language studies, teachers are told that no text book is used in the first grade, that "all work in this grade is oral," that the work should be "closely connected with home life and experiences." For the second grade there is no adopted text book, but teachers "should have access to such books as are applicable to the work. . . . There is a wide variation in individual spelling abilities and it is the responsibility of the teacher to make assignments accordingly . . . remember that a pupil will have no need to spell a word until he knows its meaning."

Number must be meaningful

In regard to the teaching of arithmetic, the Nevada elementary course of study has these things to say. "There is a reaction against . . . the formal manipulations of arithmetic skills in the early grades. If they are taught before the child . . . is mentally ready they will not be retained. On the other hand, many arithmetic facts for which the child has use can be taught. . . . We must invest numbers with meaning before we teach abstract number processes. In order to do this we must proceed much more slowly than in the past." The answer to the question as to when arithmetic teaching should begin, "depends upon what we mean by arithmetic. If we mean the formal mastery of addition and subtraction facts. . . ., the subject had better be postponed to the third or fourth grade. If . . . we consider that arithmetic is understanding the everyday situations that involve quantitative adjustments, then it may be started in the kindergarten. . . . We have lessened the requirements on formal manipulation of arithmetic skills and increased . . . number concept and quantitative adjustment." Despite the fact the Nevada elementary course of study was issued as far back as 1938, its recommendations about handling reading, language arts and arithmetic correspond closely to practices advocated by numberless articles on the tool subjects which have appeared in Indian Education. (See pages 17 and 18.)

Use many different books

"No one of the texts is considered a complete course in science. . . . We recommend that teachers . . . equip themselves with several texts covering the several fields they feel are most beneficial to the children of that community." One of the special aims of science experience is stated to be "to enable the children to better understand . . . and control their environment, and to adjust themselves to it through knowledge of the science involved in the daily problems of living." Compare these aims with certain phrases from the primary objectives of Indian schools: To aid students in analyzing the economic resources of the reservation and in planning more effective ways of utilizing these resources . . ., intelligent conservation of natural resources, . . . Develop better health habits, improved sanitation and higher standards of diet with a view to the prevention of tuberculosis trachoma and infant diseases, . . . to aid students in achieving some mastery over their environment (see pages 11 through 20).

For training in citizenship, Nevada recommends, "organize the school into clubs and assign duties to the children. . . . Since there is no offical text to follow, the teacher will need to develop the course on a project basis,. . . build projects which are suitable to the community in which she serves. . . . Guide each pupil and keep him 'going somewhere' vocationally. . . . Train more in school for the things we really do in life. . . . Include organizations in music, athletics, art, policing, curio and stamp collecting, agriculture, debating, sport, pets, active community work." As part of the training in good citizenship, teachers are urged to help children realize that "conservation is the foundation of the welfare and stability of the future generations," and involve children in establishing a "safety code for home and highway."

NEW MEXICO

Among recently issued state courses of study is that of New Mexico. (1) it illustrates many trends in the direction of making education more realistic, less completely prescribed but with greater initiative for the local school in developing an environment-centered curriculum and better provisions for each student to progress at the rate which is individually possible for him.

Local adaptation desirable

The new elementary course of study for New Mexico states that major emphasis has been placed on developing skills together with interests in activities that will be carried on by the pupils after they leave school. It goes on to say that this course of study is intended to be used as "a guide" by teachers, and they "are urged to adapt the material to the needs of the communities in which they teach." Several times repeated is the caution that "deviations from the outline may be necessary and should be made to meet the needs of the curriculum in any one community and also the individual needs of the child. . . . It is important that the teacher become acquainted with the community, survey its resources—so as to utilize the community as a basis for curriculum development."

This new course makes these recommendations. "There should be ample opportunities for children to help plan, execute and evaluate their own experiences so that they are able to participate happily and naturally in a democratic society. . . . Without a plan little is accomplished in any undertaking, and conducting a school is no exception. This plan should be flexible, include good techniques of method, contain a curriculum that provides for the acquisition of tool-subject skills and for information in the field of content subjects. . . . The emphasis in teaching has consistently shifted from teaching subjects to teaching **activities** and accordingly there must be flexibility to work around large centers of interest. . . . This in turn calls for large blocks of time to permit following a vital interest through, in contrast to many brief recitations on unrelated subjects."

Teachers are advised that, instead of devoting a certain amount of time each day to some unit of progress, "it is better to plan a certain amount of time each week, sometimes using the time all in one day, some times spreading it over two or three days," because this "aids in giving children a sense of accomplishment not always attained in short and interrupted periods. Every day may differ, for growth implies constant change."

LaCommunidad reports results

Pages 16 through 24 describe a desirable type of school day in a New Mexico public school. The account is from a book, La Communidad, (2) which details a five year educational experiment. Mary Watson, now Director of Elementary Education for the New Mexico State Department of Education, was principal at this experimental school.

"In the elementary schools, social studies have broad implications. The child must, on his own level, experience life itself. . . . The minimum interpretation of social studies is the inclusion of history, geography and citizenship; the maximum, the whole child in his whole environment. . . . The terms science, history, geography, literature, art, music, health are . . . good terms because they delineate certain fields of knowledge and experience. As these fields . . . are inextricably related and interwoven, it seems advisable to present them in terms of human life common to all people."

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(1) Curriculum Development in the Elementary Schools of New Mexico, State Department of Education, Santa Fe, New Mexico, 1944. $1.00.

(2) La Communidad. L. S. Tireman and Mary Watson, University of New Mexico. Albuquerque. $2.00. New title "A Community School in a Spanish-Speaking Village."

Units of work advocated

Organizing subject matter into units of work is taken for granted. "In working . . . on a social studies unit, many opportunities present themselves to motivate the mastery of subject matter, far more than in the . . . subject-centered program." Sample units of work on several grade levels, suggestive of what a teacher herself might develop, are included.

Pages 129 through 146 describe a social studies project in the field of citizenship. The project is called *Marshall City*, and explains student government activities carried on at the John Marshall School in Albuquerque.

In Janurary, 1945, the General Committee for the State High School Curriculum Program wrote to members of the Special Committees charged with reorganizing the course of study for secondary schools. Referring to the last revision in 1931, the letter says, "It is suggested that you retain those elements which have proven their worth, and that you discard recommendations which experience has revealed as valueless. If past events, or anticipated future changes, prompt you to suggest objectives which are entirely new, may you be courageous in expressing your best thought in such instances."

High school should recognize individual differences

As a guide to the Special Committees, the letter includes a suggested table of contents with some elaboration of each of its headings. The agreements of the General Committee are based upon the following fundamental understandings: "The minimum essentials should be adjusted to the average pupil. . . . Secondary school pupils are a heterogeneous group marked by great differences in background, interests and abilities. . . . The secondary school teacher is well prepared to make the many adaptations needed to meet the needs of individual differences provided she is freed from the rigid requirements of a completely prescribed course of study. . . . A number of things well done are better than many things attempted and not mastered. . . . Both pupils and teachers are under constant pressure because of the assumed responsibility of covering every page (of the text book). . . . The attempt results in too little attention to these elements whose mastery, or lack of it, condition the pupil's ability to make use of those elements."

A list of general objectives is included. These are quite similar to the primary objectives of Indian schools (see pages 13-15). Each Special Committee is instructed to develop an outline of ideas as to the relationship existing between the general objectives and the specific course. "This means essentially that the contribution of the specific course to the attainment of the general objective should be revealed," together with the contribution which the courses make to the students in their practical life situations.

Flexible program essential

"While the General Committee is committed to the policy of emphasizing the minimum essentials, it is necessary to make suggestions concerning enrichment of the curriculum for the gifted pupils and modifications of the curriculum for those of limited ability. . . . In order to meet the needs of the less able students, more flexiblity is needed and might be accomplished by the following opportunities. Refer students to additional texts more simply written. Read popular books in the same or related fields. Work on simpler projects or reports. Make use of pupils' special abilities in other fields. Listen to reports by more able pupils. Give sufficient praise for accomplishment. Dwell more on the tangible. Make increased provisions for construction work. Broaden the base to allow credit for related activities. Arouse interest in vocational opportunities."

Each Special Committee is expected to stress materials which are closely related to the pupil's normal, daily experiences in and out of school. By pointing out those areas of the outline which can be so utilized, "teachers can be encouraged to bring more realism into the classroom."

Suggestions about correlation with other subjects are, "No subject can be isolated," and "Do not go out of your way too far to reveal means of applying the subject matter under consideration to other fields, at the same time bear in mind that no course stands alone but becomes an essential small part of a larger program."

Challenge pupil participation and planning

The comment is made that "between the authoritarian teaching of earlier years" and the idea that the pupil "need not do anything he does not happen to want to do" is a middle ground that "encourages and challenges pupil participation in planning and carrying on learning experiences for the benefit of the group. This is the procedure referred to as 'socialization,' and which we recommend."

The letter states that "problem solving is so important an aspect of everyday living that a teacher should avail herself of every opportunity to help pupils locate problems and should use these problems as a means to increase pupil skill in problem solving." It goes on to point out that "there is a casual relationship between projects and problems, and that you cannot have the former without first having had the latter." Finally, it cautions against beginning the preparation of a unit of work by thinking only of subject matter, "think first of the understanding that you would like the pupils to have," and which would lead to some alteration in the pupil's way of life, "when such an *understanding* is your definite aim, then search for the learning experience which will serve as a means to the development of the understanding."

Elementary Schools

The new state course of study for elementary schools devotes much space to the discussion of techniques for teaching reading, language and arithmetic. This bulletin embodies in its recommendations the findings of numbers of projects in educational research which are recognized as having proven their worth.

Consider individual differences

The following comments are indicative of the general point of view: "Children do not learn according to any one preconceived idea. . . . In the past, a certain part of (each of the tool subjects and content subjects learned) was designated for each year in school. The recent trend seems to be in the direction of finding out where each child is in his achievement and interests, and building on that. It would seem reasonable to prepare or buy diagnostic tests and then help each child analyze his own case and outline his own program. Instead of trying to keep all ten year old children together, it would be much more sensible to group those who were having the same difficulty. . . . The teacher directs the mental development of the child from the level of achievement he possesses when she receives him, to the next higher level."

In considering techniques for teaching reading, considerable attention is given to factors which retard progress. "Large classes in primary grades make it impossible to give the individual child the attention he needs. . . . Inflexible grading and promotion schemes, with rigid and uniform requirements for passing. . . . Lack of adequate materials to meet different age interests or to care for varying abilities. . . . Too early entrance into school. . . . Poor teaching methods."

The non-English-speaking beginner

Many suggestions for better methods of teaching reading, especially with beginners and first graders are given. "The schools vary a great deal in the readiness for reading among the different groups of children. Some schools are faced with the problem of children who do not know English when they enter school. These children need a long and more concentrated program to prepare them for reading than do children who knew their English and who have had many interesting and varied experiences before they came to school. All children should be tested for reading readiness before charts or books are introduced to them. The preliminary training period for different groups of children will vary from three months to one school year."

Varied experience necessary

The proposed preliminary training period would stress experiences like the following: "Providing each child with real, varied and rich experience through excursion, through practical activities such as caring for a pet, food experiences such as making soup, cocoa, cookies or a garden. . . . Training in the use of oral language by providing opportunities for listening and conversation about trips or experiences, story telling and retelling, discussing pictures, simple directions or explanations, group (oral) compositions on room interests. . . . Social experiences; birthdays, special days—Thanksgiving, Christmas, Valentine's Day, game experiences and dramatic play, visiting other rooms, parties. . . . Experiences in manipulating, coloring, painting, sawing, hammering and building."

Recommended for increasing reading readiness are numerous types of games and exercises which are designed to develop "visual abilities" for children who have "poor memory for objects and forms which they have seen;" to develop "auditory abilities" for those who have "difficulty in remembering what they have heard;" to develop "motor abilities" because some children are "clumsy and lack coordination in their movements;" to improve articulation because "speech defects should be corrected—before the child is exposed to reading."

Reading readiness essential to success

"Until recently our first grade programs have been built on the assumption that children have had their preparation and are 'ready' to read." The state authorities recognize that there have been far too many failures among first grade children and that these failures "were largely due to children's inability to meet the requirements set for them in reading skills. Many studies have resulted in the conclusion that children learn to read much more readily and pleasurably, that they develop good attitudes toward reading much more surely, and make much more rapid progress if teachers wait until children are fully ready to undertake reading before beginning its definite instruction."

Flexible groupings recommended

The following statement represents the policy in regard to the teaching of reading from the second grade upward. "The practice of flexible grouping, not only in reading but in all school activities, greatly facilitates individual and group progress. The child with a reading problem should be placed in the group or grade where can he secure the most help on his particular problem. Children who move to another grade for reading are referred to as 'visiting' readers. Children know that no change is permanent, and they are moved as fast as sufficient improvement is shown. Each child returns to his own grade for his other work." An added comment is that reading problems should receive more recognition during content subject periods, in addition to the attention given them in regular reading periods.

Language use grows from activities

For language experiences, teachers are encouraged to aid in vocabulary growth by planning occasions for children to use words which they have learned through their activities, and to devise ample opportunities for oral expression by the child. Children are encouraged "to talk about their personal interests with the group" and to exchange ideas. For first graders, it is suggested that they can develop the ability to write their first name and captions for original drawings in one word or in short phrases. For second graders, "stress story telling, dramatization, but above all, provide situations where children will have something to talk about." In written expression, second graders may "make captions for pictures brought in for the bulletin board on individual or on social science interests. These captions may be a word or a phrase at the beginning of the year, and complete sentences as the child acquires ability to write a statement. At this time the use of the period is taught. . . . A composition is dictated by the group, written by the teacher on the board, later on made into a chart for re-reading."

The new course of study has this to say about spelling. "The teaching of spelling, beginning in the second grade, has as its aim the furnishing of tools the pupil will need to use in writing. Too much stress has been given to learning columns of isolated words rather than to skills that will be an aid in written expression. . . . Where pupils have an important part in the selection of words to study, there is a definite spelling consciousness," and teachers are urged to use words taken from special interests in the classroom or from the social science interests. "Most children who have spelling difficulty are not getting enough practice in using words in written expression."

Must give purpose to writing

"Children do not have any particular need for writing. They do not understand the social significance of writing. Therefore the social school must provide many experiences wherein writing is given purpose and meaning." Teachers are advised to start writing lessons in the latter part of the first grade and to continue them through the second grade. "It is advisable for children to do their first writing on the blackboard. . . . Experimental practice has determined that the use of manuscript writing is a distinct aid" to children in their beginning attempts to learn to read.

Postpone computational skills

Here follow statements which present the New Mexico public school thinking in regard to the teaching of arithmetic. "Many of the recommendations for grade placement are in the nature of *moving it up*. There has been a postponement of arithmetic work previously required in primary grades." For pre-first and first grade are suggested: "emphasis upon the building of number meanings and the development of concepts, such as those of size, quantity and location, a stable arithmetic readiness background," to include among other things the ability "to repeat their ages; to count out the correct number of scissors and similar materials; to sense that 5 is more than 2; to begin to gain the concept of time, time for recess, time to catch the bus, marking special days on the calendar; to begin to gain the concept of size, a big ball, tall, short; to begin to gain the concept of coins, a dime buys more than a nickel; to know the meaning of words like *more*, *less*.

"After numbers are experienced through an integrated series of activities in pre-first and second grades, more mature children, with a basic fund of number knowledge and experience to which can be related subsequent learning, are now ready for computational arithmetic."

While school systems must necessarily differ at points from other systems in the matter of grade placement of elements of arithmetic, reading and language work, there is close agreement between the point of view of the New Mexico public schools and the Indian Service in regard to the necessity for making arrangements for individual progress in mastering the fundamental skills in all the tool subjects, and in regard to an acceptance of the fact that child growth and development is a matter of slow and gradual maturing over a considerable period of time.

Non-English-Speaking Children

A considerable section of the new state course of study (pp. 320-333) discusses problems of dealing with those who enter school without the ability to speak or understand English. Because of the large number of children from Indian and Mexican speaking communities in the public schools, many of their teachers are faced with the same puzzelment encountered by numberless Indian Service teachers. Significant statements in this section of the bulletin indicate how similar are their problems to ours.

Bilingual difficulties

"Bilingual children are those who think and speak at home in a language other than English, and who upon entering school must learn to think, speak, read and write in a language new to them. In addition many come from an environment which has given them little opportunity for developing the necessary concepts which will enable them to understand the things which are presented in the beginning charts, pre-primers and first readers. Often these children are timid and shy, and have difficulty in adjusting themselves and becoming a part of the social school group."

Activities helpful

Some of the devices which have been helpful in dealing with the bilingual child are: "to secure the cooperation of other children in making (the newcomer) feel at home in his new surroundings, . . . to impress the child with (the value of) the contributions which his ancestors have made to our American way of life, . . . to appreciate the particular contribution which he himself can make to the new school group, . . . through the use of concrete materials such as pictures, objects, construction materials, books, toys, etc., to build up the necessary background to first hand experience. . . . Activities provide excellent opportunities for developing the ability to speak English in real life situations. If the children can participate in the activities successfully, the motivation for learning English is greatly increased. . . . Develop the experience background as well as the social adjustment, emotional stability and language ability before hurrying the child into formal school work. Many authorities agree that most bilingual children will need at least a year or readiness development before they begin book reading. . . . See that the child is given only such work as he can do with a reasonable degree of success. . . . Be patient. . . . Establish friendly relations with the child's home and the welfare workers of the community. . . . Set up situations which require the use of English (by the child). . . . Praising the child for using his new (language) accomplishment in the classroom, on the play ground and at home will do more to stimulate his desire to speak English than making rules forbidding him to use his native tongue. . . . In evaluating the child's work, do not consider his progress in academic work alone. Of equal, or greater importance are his progress and improvement made in social and emotional adjustment, development of concepts, habits of cleanliness, and language."

Centers of interest

Among many suggestions about materials of instruction to be used, these few are selected as representative of approved procedures. "Centers of Interest should include: Library Corner: plenty of picture books. . . . scrap books. Keep the vocabulary to be taught in mind; Play Center: to attract the child in establishing an English vocabulary. Provide toys, airplanes, wagons, boats, balls, animals, garden tools, musical instruments, families of dolls, playhouse und some furniture and housekeeping 'equipment,' personal cleanliness equipment; Construction Center: manipulative materials, paper, crayons, paste, colored paper, newsprint, clay, workbench, scraps of wood, wooden boxes, tools, nails; Science Center: The splendid new primary science texts will give plenty of inspiration for varied material for observation, aside from the usual aquarium and terrarium" another section of the course of study makes fuller suggestions about the Science Center. A low table and a few shelves will suffice. Teachers are reminded that all children are interested in insects, rocks, leaves, animals, plants, trees, birds, electricity, soil, and other aspects of nature, and that we should allow them to experiment with, observe and handle such things in the classroom. Specimens are displayed on the shelves and changed frequently. Pictures of flowers, insects, birds, etc. are part of the Science Corner "The science interests in the corner will motivate many worthwhile excursions to many parts of the community, and provide material for oral language; Beauty Center: Display one article at a time for its intrinsic beauty. The contribution may be made by the teacher, more often by the children. Never turn down anything which a child may bring for this purpose." Descriptions of additional centers of interest—Health Corner, Handicraft Center—are found in other parts of the bulletin.

Helpful practices

The following are offered as practices helpful in vocabulary building with bilingual children. "Select two or three words a day for the first two or three weeks, increase as children become accustomed to school. . . . Select words that are easily taught together —*on, under*. . . . Teach words at a suitable time—*snow* on a snowy day. . . .

Sounds that are difficult and words too similar in sound are taught on different days —*tomato, potato*. Be sure to note any difficult sounds and check on these. . . . If action words are to be taught, be sure that there is available space to demonstrate the action. . . . Use a variety of materials in presenting a word. . . . As soon as possible have the children answer in complete, but very brief sentences. . . . Teach songs, rhymes, finger plays and games that include the words (in the agreed upon vocabulary). . . . Tell stories in which the words occur. . . . Dramatize stories and rhymes. . . . Put objects out for (children) to play or work with after they have learned the words. The teacher goes around the room, talking with children about what they are doing. . . . Make a large picture dictionary. Floor blocks are available and children will begin to build with them. This furnishes a splendid lead for discussion. . . . Drill in comprehending and using words through pictures, games, dramatization, songs, stories and rhymes. . . . Possible excursions. . . . File individual drawings and paintings (as later discussion material). . . . Make group picture books, illustrate them, write group compositions.

"Practically all of the foregoing material is necessary for reading readiness. Developing reading readiness is especially important for the bilingual child. After facility in the use of English has been established, most of the other suggestions for developing reading readiness in English speaking children are equally applicable to the bilingual child."

Help for small school

New Mexico, like the Indian Service, has many one and two teacher schools. The new course of study (pp. 307-318) gives detailed help to teachers in such schools for bettering their practices and procedures.

"The idea that one and two room schools are isolated places, with underprivileged children, is wrong. They are a true picture of American democracy. There is a closer tie between children, teacher and parents in small rural communities. This living and working together as a group will bring about responsibility, cooperation, leadership, and development of abilities and interests."

Pupil groupings for instruction

"After stressing the educational value of having children share in the planning and in the participating responsibility for arrangements in regard to classroom furnishings, heating and ventilating cloakrooms, toilets, drinking water, the hot lunch period, and playground activities," the problem of grouping students receives attention. "It is unwise and very inefficient for teachers to attempt to teach all subjects in each of the eight grades. A workable plan is to combine two or more grades and alternate the sequence in the various subjects each year. This grouping must be explained to both children and parents. Grouping should always be considered from the standpoint of the children's needs. The first and in many cases the second, grade children read together. The third and fourth grade program widens. The fifth and sixth, seventh and eighth may be combined into two reading groups. The seventh and eighth grade group may be able to do independent reading to solve problems. The teacher should strive to have not more than three reading groups in order to have time for all related reading activities for each class. . . . Regrouping will continue for months. This means that some seventh and eighth graders might have to read with fifth graders who are reading a fourth grade book. Many of the recent text books are so identified that grades are not mentioned. This arrangement lessens the embarrassment of the older pupils. The teacher can make the pupils realize that this is for their own good and that she is trying to help them to help themselves."

Vocabulary building important

"Language, writing and spelling can easily be combined. Very little writing and no spelling will be done in first grade. The second and third may be combined, the fourth and fifth, the sixth, seventh and eighth. Language itself cannot be confined to set periods but should be stressed throughout the school program by building an adequate vocabulary with which children can express themselves.

"Because of all this grouping which is done in the one and two room school, and because grade levels are disregarded, it is imperative that teachers keep individual records of children's progress."

Individual difference can be provided for

"In one and two teacher schools, the teacher has a wonderful opportunity to provide for individual differences which is not always possible in a larger graded school. Formal (grade levels) can be disregarded and subject matter divisions need not be adhered to. Subject matter of one and two room schools should be adapted to rural problems. Since it is true that most books are planned for city children, it is up to the teacher to supplement with material which will be worthwhile to her group. The matter of books is not as important as making use of a community and its resources, newspapers, magazines and the radio. A school garden can help motivate the study of agriculture. Testing the soil, planning the garden, collecting seeds and preparing the soil can be a few of the problems solved in any rural district. The teacher, by cooperating with the community, can easily make (children and parents) understand that, though the three R's are important it is honest thinking, learning to take the initiative and forming habits of cooperation, which help the three R's."

A common project for all grades

"The social studies cover various areas of living. Again, combining can easily be done. The first three grades study their own homes and community, the immediate locality only; fourth and fifth, expand their interests to wider field and somewhat more complicated problems. The same unit is carried on in all grades. While primary grades are learning vocabulary concerning the unit, second and third are doing simple reading, writing charts and discussing, fourth and fifth are doing more extensive reading concerning the same unit, and sixth, seventh and eighth are doing still more extensive reading research and discussing. Use as many (different) geographies and history books as are available. Some days the teacher may spend the entire period discussing and planning with the lower grades while older pupils are reading and doing research. The following day the lower grades group might be busy while the older children discuss, report or plan.

"With the help of sixth, seventh and eighth graders, third, fourth, and fifth graders can make a detailed map of their community recording any kind of data, such as bus routes or points of interest where excursions might be taken. Wildlife of the community, farm crops, roads are a few suggestions for mapping. Maps will motivate reading and discussing.

"Carefully planned excursions which grow out of the curriculum will enrich learning.

"In arithmetic, again the teacher should find out where each child is in his achievement and interest and build upon that. Children having the same difficulty are grouped together regardless of grade."

Those who have followed **Indian Education** through the years of its publication or who have read **Education For Action** and who are acquainted with the offerings as Indian Service Summer Sessions, will recognize numerous likenesses between what they have learned and what is now being suggested to teachers in the public schools of New Mexico.

NORTH CAROLINA

In 1941 the General Assembly passed a law extending the public school system from 11 to 12 grades. The State Superintendent of Public Instruction and the Central Curriculum Committee of the Twelve Year Program Study, in 1942, issued **A Suggested Twelve Year Program.** This bulletin gives an over-all view of the suggested curriculum. Later, more detailed bulletins are to be developed democratically "through the active participation of all of the teachers of the state."

Guiding principles of curriculum making are stated. Curriculum building "is a continuous, on going process, . . . must be flexible enough to permit satisfactory local adaptation and experimentation, . . . should provide for participation . . . of pupils, teachers, parents, and the laity in general. . . . Program changes at one level should not be made out of relationship to all other levels of instruction. . . . The success of a curriculum program is dependent upon a wise utilization of the latest information and research concerning the growth and development of children."

Part 1 of the bulletin lists objectives and discusses administrative problems of pupil progress and guidance. It admits the need for giving the "public school program a vocational trend," for "training the great mass of boys and girls in North Carolina who do not get to go to college," for revising the state system of education to "make it more realistic," for accepting the challenge "that the secondary school need not be bound by conventional patterns of content or organization," for following the thought that education should "include social, emotional and physical growth as well as intellectual growth," and for "making adjustments that will assist . . . in overcoming the high rate of slow progress in our school."

Speaking of failure and promotion, the bulletin states "that pupil progress . . . can be achieved by undertaking certain corrective measures: a curriculum better adapted to the child's needs and abilities; more time for the child to grow and assimilate the curriculum; better attendance; improved child health; more attention to . . . mental hygiene . . .; removal of community distractions; a more interesting, dynamic school program. . .; better administrative practices. . . : Local administrators and teachers are urged to cooperate in developing better policies, in studying the literature on promotion, and in making a survey" of existing promotion conditions. "The first grade has been the grade in which . . . by far the greatest per cent of non-promotion is found.

"The effect of non-promotion on school organization, size of grades and program of instruction is . . . great. The effect on the pupil is . . . much more serious. Failure . . . influences both his personality and his achievement. . . . Studies show that pupils who are promoted learn more than pupils of the same ability and achievement who are retained . . . 65% of the pupils repeating a grade did either poorer or no better. . : . The pupil who fails must return to the same work without a clear understanding of how he can reach his objective, *plus* a general feeling of inadequacy. . . . He looses self respect, self confidence and a feeling of 'belonging'; his interest is replaced by a feeling of resentment toward . . . the school and . . . results in such undesirable personality traits as withdrawing, day dreaming, backbiting, cheating, and generally unsatisfactory aggressive behavior.

"One theory of pupil progress holds that there are identical achievement standards that must be met by all pupils before they can pass from a given grade to the next. . . . The other believes that equivalent opportunity should be offered all pupils in terms of their ability to do various types of school activities," and that children should "keep moving through the grades according to chronological age; non-promotion in a system run on this plan seldom occurs. . . . In many cases promotion is based solely on the teacher's monthly report marks, or almost exclusively on standardized test scores. Measures of pupil growth in many areas are needed" for a valid appraisal of pupil progress. Indian education holds a similar point of view in regard to these matters.

"The function of the guidance program is to help the student reach his optimum development in relation to his own ability and in his relationships with others." The need for in-service training of teachers in this field is recognized. A few specific guidance procedure for both elementary and secondary schools are outlined.

Part II discusses teaching procedures and suggests content and methods for grades 1-12 inclusive in language arts, mathematics, social studies, science and health and physical education, art, music, industrial arts and vocational education.

Among over-all suggestions are: "Many skills and many areas of information are to be found in books, in courses of study, and in demands made by pressure groups. Teachers . . . should exercise critical ability in selecting the appropriate material for the children concerned. They should choose for emphasis . . . those skills and that information which will be used most often by the greatest number. . . . There is no reason why an enterprising teacher cannot so integrate her program that the mere going through text books would be neither necessary or desirable.

"Spelling for spelling's sake, reading for reading's sake, arithmetic for arithmetic's sake, information for information's sake, at least in the . . . elementary classes and in the general courses in high school, are hardly justifiable. Learning of any skill or fact or habit or attitude . . . should serve some purpose in a larger, well understood plan that the learner has helped to make. . . . A whole class . . . will seldom need drill upon the same skill at the same time.

"The facility with which the language arts . . . are used is the surest guarantee of academic success. . . . Every hour of every day in every classroom . . . whether the teacher is designated as an English teacher, as a primary teacher, as a mathematics teacher, as a vocational director . . ., as a coach, there should be present the feeling of responsibility for guidance in the effective use of language. . . . Unless all teachers act as suggested, schools will still have to suffer the accusation that *products of our schools can't read, or spell, or write, or talk*, as the case may be.

"In the social studies, in science and in the language arts . . .,the local setting and the present . . . offer valuable and interesting beginning places. . . . From the local community to North Carolina and to the nation, then into the *far away and long ago* should be the general approach. Such procedure is psychologically sound.

"Books are valuable assets. . . . So are radio and motion pictures. Visual education . . . is also possible though excursions, dramatizations, constructions, collections, exhibits and graphic representations. These . . . should play large parts in effective teaching and learning.

"Classrooms should provide many opportunities for working together to consider problems, make plans, carry out plans, and evaluate accomplishment. . . .; for finding and assuming responsibility. . . .; Classrooms must become more than places for recitation [illegible] facts or for carrying out directions of teachers.

"The development of right attitudes . . . is more likely to result" if learning has "pleasant accompaniments." It is recommended that every teacher in North Carolina "read at least one good book on Child Growth and

Development, especially mental and emotional growth, every year."

Language arts

"The . . . language teacher must accept as her goal" the development of language art skills in every pupil "in so far as his ability permits, and through a flexible and integrative program. . . . Emphasis in the earlier years should be on oral language. Effective expression, both oral and written, is an indispensable tool in the social development of every child. . . . Emphasis should be focused on . . . free and correct expression of ideas as they are needed in activities that are vital in the social, civic and vocational lives of the pupils. . . . Emphasis upon expression with proper guidance in usage tends to produce more fluent and correct speech . . . than does work upon formal grammar.

"The first grade teacher should recognize that children mature physically, socially, emotionally and intellectually at different rates. . . . A great deal of time must be spent in developing their readiness for reading. . . . Reading . . . involves interpretation in terms of previous experience. . . . Children must see, touch, taste, smell, and otherwise experience the characteristics of many things before words can mean anything to them. . . . Readiness is as necessary on the higher levels and in the various subject matter fields as it is in the first year of school. . . . Each time a pupil meets a new and different field of reading, he needs guidance. . . . The development of readiness is an individual matter which cannot be hurried or forced. . . . In the majority of first grades better habits and attitudes will be established if there is no reading of first readers by children who do not read primers easily and happily.

"Manuscript writing is recommended. . . . The first practice . . . should be done at the blackboard. . . . When the need for written expression arises, practice in making letters is important—not . . . isolated letters, but . . . writing the words needed."

Teachers are cautioned that even as far along as the 4th grade there will be "a wide range of abilities . . . ;rates of progress will vary in each individual; and weaknesses will become more apparent. . . . Sustained progress . . . will call for . . . careful grouping to provide for individual differences." On the 5th grade level, "while the greater part of the language work is still oral, the pupils should find pleasure in expressing themselves in writing." In the 8th grade it "is important that language arts be made functional through correlation . . . with social studies, science and other content areas. Classroom activities such as publishing a class newspaper, dramatizing stories . . ., planning and carrying out a community project" are advocated. For the secondary school it is proposed that the "English department, after consultation with other departments, get out a standard usage chart for all teachers, showing acceptable forms of manuscripts, outlines and letters and giving the fundamental rules of punctuation and grammatical usage. "The use of subject matter centers of interest is suggested, and it is felt that "the teacher and her class may well plan together . . . satisfying units . . ."

Arithmetic

"The purpose of arithmetic is to equip the learner . . . to live more proficiently, more happly and more intelligently in the quantitative society of the present. . . . The arithmetic curriculum transcends the arithmetic period, for significant quantitative situations" arise throughout the school day and "in numerous activities outside school. . . . It is normal for different children to work at different rates of speed, for one child to require methods of presentation different from those suitable for another child. . . . The arithmetic curriculum must be flexible enough to allow for many kinds of differentiation, both as to rate of learning and as to caring for a pet, planning and putting on a content learned." A class grocery store, party, a sale to raise money, school and home gardens, a class newspaper, a class postoffice, are long-time activities which serve as some of the means of making arithmetic functional." The search for illustrative material should send mathematics teachers and students to the teachers of science language, art, geography, social studies, and also to banks, shops, stores, farms, courthouses, offices, etc. . . . The trend in mathematics is from a narrow computational subject to a subject of broad economic and social significance. The computational aspects of arithmetic are now handled mainly through . . . mechanical devices . . . such as the adding machine, computing scales, computing gasoline service tank slide rules and comptometer."

Social studies

The social studies "include material . . . drawn from the fields of history, geography, economics, sociology, political science, psychology and ethics. . . . The schools . . . should provide opportunities for children to live in a democratic way. This can be accomplished only when pupils take part in planning and carrying out school activities of all kinds. . . . Study of the immediate environment and of the state in general is relatively more important than an intimate knowledge of places far away, both with reference to time and geographical location.

"Some of the most effective integrations . . . take place in the development of social studies units of work." The bulletin suggests titles for a broad central theme for each year's work and mentions a few units of work appropriate to the major topic for each grade. The caution is given that "it is not desirable . . . to make almost identical studies of such topic as *Pilgrims* or *transportation* in successive years.

"Teachers should provide time in the daily program for a planning period . . . a work period . . . a report period . . . and an evaluation period. Each of these calls for active participation by pupils and for guidance by their teachers.

Science

This program, a continuous and regular part of the curriculum from grade 1 through 8, "may consist of science as a part of large units integrating many subjects, of science that arises incidentally, of science units that are organized on a given topic, and of science activities arising in the activity program." Science must be made "dynamic and functional. . . . Biology should include study of the human body and of all its life processes. Physics and chemistry should be practical in nature. They would thus be not only more worthwhile for the high school graduate who does not go to college, but they would also be less likely to duplicate experiences that the student would have in these subjects if he should attend college." Under health and physical education are listed health activites by grades, and suggestions are presented for integrating health work with the center of interest for each grade.

Arts and Music

Recommendations in regard to art are found in the record of an account by students of a class trip to see the docks along the river. Out of the discussion come requests by the children for pictures to be painted, some carvings in wood and soap, a clay model of a monument for the town square to replace one which the children do not like, a movie of certain dock scenes (one of the boys owns a movie camera) a map showing the school in relation to the docks and intermediate points of interest, and some linoleum block prints. "Art in this way, as part of the curriculum, gives children another medium through which they express their feelings and observations." Indications of child growth in art skills for which the teacher may be on the watch are listed for the several grades.

"Each teacher will likely find a place for music in every large unit . . . of work," the type of music activity used depending upon the nature of the unit. Possible music abilities to try to develop at different levels are suggested.

Industrial Arts

"In the elementary school industrial arts experiences should be a unified and integral part of pupil activity." The pupil's interest is centered "on his home, school and neighborhood, where he daily comes in contact with innumerable products of industry that are made from materials easily obtained and easily manipulated—materials with which he can satisfy a need." For the older pupils, "the shop or classroom should be a place where pupils can create those articles which they have wanted to make and could not because the home provided no opportunity. . . . The program should include . . . the wise use and care of hand tools. The pupils should be encouraged to develop sound work habits and to appreciate good workmanship."

Vocational Education

Vocational education is planned "on the assumption that the students have had many experiences prior to enrolling in these classes which have prepared them for this instruction. . . . Interest in rural living and agriculture have been fostered through the study of gardens and food preservation, animal and plant life, country life . . . and this lays a foundation for homemaking as a vocation. Shop activities, the study of community workers and how people earn their living, can . . . contribute to awakening interest in trade, industrial . . . and distributive education. Special attention should be given to the dissemination of occupational information of the community, the region and the the nation . . ." the training experiences should help the young person "to select more intelligently the work for which he is best suited."

"*The Day Trade Program* is school shop training, planned to prepare the student specifically for skilled trades. . . . The boy who receives this instruction will not emerge as a journeyman, . . . but instruction will develop in him some of the skills useful in his chosen trade. . . . The Diversified Occupations Plan involves a cooperative arrangement in which commercial and industrial enterprises in the community. . . furnish part-time employment to students during school hours. . . . The students learn the manipulative part of the job under actual working conditions. . . . The school facilities furnish the technical subject material related to the job being learned . . . and a qualified coordinator," who supervises the related work of the student at school and visits him during the work period in industry. This program is especially advantageous "when only one or two students desire training in any one occupation. . . . "It provides initial employment under the protection . . . of the coordinator" and it "almost guarantees employment immediately upon completion of high school."

If the present bulletin is compared with *Suggested Procedures for Curriculum Construction and of Course of Study Building*, issued in 1934-35, it is evident that North Carolina has made considerable progress in the implementation of philosophy and policies along the same general road which Indian Education has been following. No two groups of educators agree at all points, but there would be less difference in philisophy and approved procedures between North Carolina school and Indian Service schools than between the curricula advocated by departments of education of different states.

NORTH DAKOTA

A survey of quotations from the latest North Dakota Course of Study reveals striking similarities between its objectives and those long held desirable for Indian schools. Anyone of the half-dozen statements which follow might have formed the basis for numerous articles which have appeared in **Indian Education.**

"In formulating objectives, we must take into account the nature of the pupils in attendance. . . . The first duty of the school is to teach the pupils to do better the desirable things they are most likely to do anyway. . . . Schools should teach pupils to function better in those situations which they are most likely to meet. . . . Content material must not only furnish mental training but must be worthwhile within itself. . . . Subject matter is being organized and correlated in terms of the activities of life rather than of the artificial division into subjects. . . . College entrance can no longer be the sole objective of high school education."

Local conditions influence education

Another point of contact is suggested by the recognition in the North Dakota State Course of Study of the need for relating education to local conditions and to real life activities. "Units to be taught should be governed by a careful survey of community needs. . . . We believe that it is highly desirable to organize industrial art courses to conform to conditions which actually exist in . . . our North Dakota communities. . . . The teacher's biggest job is to see that facts are connected up with every day life so that they can be of some service (to the pupils)."

Among objectives of the Vocational Agriculture Section of the State Department of Education are: "——ability to analyze the general agricultural situation in a community, ability to judge land, ability to plan effectively for farm and home improvement, ability to think a 'way out' of specific farm situations, ability to plan a long-time program of farm management, ability to participate in worthy rural and social activities."

Training needed on real jobs

Further statements about vocational education taken from the North Dakota course of study are: "A successful teaching program . . . demands worthwhile projects . . . adapted to local farm conditions," and ". . . will be efficient in proportion as the environment in which the learner is trained is a replica of the environment in which he must later work," or "the effective establishment of process habits in any learner will be secured in proportion as the training is given on actual jobs and not through exercises or on pseudo jobs."

The North Dakota State Course of Study recommends that in the field of citizenship, "Problems of democracy should be organized not on a formal basis but on concrete problems vital to society," and states that, "Mere learning of facts will not make a good citizen." It urges, . . . "give the pupil experiences and practice in handling social situations, . . . actual practice in citizenship through the school community, . . . an understanding of the civic and political problems existing in the community." One of the primary objectives of Indian schools is "To teach students through their own participation in school and community government to become constructive citizens of their communities."

Here follows a list of further similarities in the objectives of North Dakota public education and those of Indian schools:

N. D. "To develop interest in the study of the life of our forefathers."

I. S. "To give students an understanding and appreciation of their own tribal lore, art, music and community organization."

N. D. "Use of the school for social purposes such as P. T. A., club work and community recreation."

I. S. "To serve as a community center in meeting the social and economic needs of the community."

N. D. "To influence parents and other adults, through the health education programs for children, to adopt better habits and attitudes, so that the school may become on effective agency for the promotion of social aspects of health education in the family and community as well as in the school itself," and "to improve the individual and community life of the future; to insure a better second generation and a still better third generation."

I. S. "To develop better health habits, improved sanitation and higher standards of diet with a view to the prevention of (those diseases most prevalent in the area)."

From the 1944 Administrative Manual for North Dakota Schools come significant statements about making provision for individual differences among students. They parallel some of the tenets of the philosophy of Indian education. "We recognize that all children are not *problem children*, but we must also recognize that all children have problems. . . . Man has recognized for centuries that differences of ability, personality, physical strength, and other traits exist among men. Because of these differences, David was made King of Israel, Aristotle was recognized as an eminent teacher, George Washington was first chosen to direct our armed forces and later elected our first president. Despite this universal acceptance of the principle, we school people are often prone to overlook it. This oversight has resulted in a mass production type of instruction in which every pupil has been forced to perform up to a certain standard or be failed. This has led to the situation that now exists in many schools, namely: that the school curriculum is geared to the pace of the average pupil with the result that the brilliant pupil and the mediocre pupil suffer. One important function—is to determine the individual differences of each pupil and thus help him to attain the maximum of his ability."

By and large, the public school authorities of North Dakota hope to train pupils and adults to utilize those opportunities existing in their respective communities which will tend to provide a more abundant life. That they believe that the outcomes of education should be measurable in practical ways is evident in the statement, "Real education represents a changed habit or attitude on the part of the learner."

OKLAHOMA

Curriculum study in Oklahoma, began on a state-wide basis in 1940. Workshops at Oklahoma University, Oklahoma A.&M. College, and at George Peabody College for Teachers produced three bulletins which have been used by curriculum study groups and committees in many counties in the state.

Bulletin No. 1 is called **A Guide to Study of the Curriculum**. The first part deals with "current problems of a social nature;" the second part with "the aims of the school growing out of (1) the nature of the democratic social order, (2) the nature of the learner and of learning, and (3) the current problems of society:" while the third part considers "the kind of school that Oklahoma needs, to do the job implied in the two preceeding parts." The statements of philosophy, *point of view*, and objectives—if read without looking at the title page of the bulletin—might easily be mistaken for recommendations made in **Indian Education.**

School must face social problems

Oklahoma's acute social problems are stated to be, "Problems of the best use of resources in Oklahoma, . . . Home and family life problems, . . . Recreation problems, . . . Safe living, Consumer problems, . . . Communications problems, Citizenship problems, . . . Youth Problems," and "The community as a resource for economic and social improvement." Hence, says the bulletin, "Our school program needs some changes. . . . The world has changed, so the schools must change. . . .

"Elementary schools in the past were for imparting a definite body of skills, but the general, comprehensive education for life, was left to other agencies. On higher levels, education has been the vocational preparation of leaders in the social order. Pressing new demands for adapting the people to life in a democratic land, complicated by technology are upon us and the finger of logic points to the school to take them up.

"The nature of learning has not changed, but principles are being given new meaning and application. There must be an understanding of the nature of the individual, and of the nature of the social order, and of the nature of learning, in any attempt to improve instruction.

"To direct wisely through proper environmental control the development of an individual into a useful and harmonious social being is the problem of education" . . . which "results in desired changes in the learner and increases his ability to understand and appreciate, or carry on, activities both in and out of school.

"The motive force of learning is purpose." . . . and "it takes both a motive and a plan of action to constitute a purpose. Pupil purpose . . . materially conditions his present experience and determines . . . the way present experiences will serve as a guide for future conduct." When an individual "makes an effort to modify conditions in order to bring about a desired result," he may "employ a variety of means, each . . . called an activity. . . . If an activity is to be worthwhile, the individual must . . . see how his activities contribute to the realization of his purpose . . . be able to evaluate the results of his efforts in terms of progress toward his goal, . . . Evaluation is connected with every phase of the learning process" and the individual is "confronted with the necessity of weighing the outcomes of each choice. . . . The individual should be his own strictest judge."

Evaluation should accompany teaching

"The teacher . . . is to direct . . . the activities of the pupil . . . so that in the realization of pupil purpose, progress is made in the direction indicated by the aims of education. The question should be asked . . . for example, after teaching of a unit of social relationships, *Does the pupil on the playground respect the rights of others in playing the game when not under the supervision of the teacher?* . . . The teacher should be conscious that there is . . . a changed point of view, a new taste, or set of values, a new inward ability. . . . A new experience is meaningful only in terms of the past experience of the individual. . . . It is necessary that the individual have in orderly ways many meaningful experiences in order to . . . raise the level of living of the individual, and hence of society."

The bulletin quotes John Dewey as saying, "I know of no more demoralizing doctrine . . . than the assertion . . . that after subject matter has been chosen, **then** the teacher should make it interesting. If pupil interest, or previous experience is considered first, no tricks or schemes of motivation will be necessary. Artificial interest can, at best, be no more than divided interest, leaving the learner's thoughts free to work upon matters of real interest to him. . . . Nor do I see how anyone at all familiar with the great mass of existing school work can deny that the greater part of the pupils are gradually forming habits of divided attention."

Goal: problem solving not rote learning

"The point of view presented in this bulletin . . . implies that subject matter must be considered as a means to an end, . . . that it must be found in more places than text books, and that not everything in a given text book is necessarily useful or helpful. The limitation of subject matter to the contents of a given text book and the attempt to have pupils memorize all facts as important in themselves are yet common practices in our schools." The result of such procedures is that the "real learning outcomes are undesirable dispositions toward school work. . . . So long as pupils are growing in the habit of answering their own questions, seeking their answers in all available sources of information, growing in the ability to and the disposition to use these sources, forming new and wider interests, understandings and appreciations, and growing in the realization that facts are necessary for valid conclusions, there need not be any serious concern about what particular subject they are using or on what grade level they are working. . . . A rather liberal disregard for departmentalized instruction, allowing the learner to seek information wherever it may be found, will help to prepare him for a continued interest in the solution of life problems after he leaves school. . . .

"It should be remembered that even before drill can begin, the pupil must have a goal toward the realization of which he is striving, . . . most facts can best be taught when there is a pupil need for them in the solution of a challenging learning situation. . . . This viewpoint does not eliminate practice, but it does emphasize the point that in any practice exercise the purpose of the learner should be uppermost . . . and that the practice should be continued only until this purpose is realized.

Social participation important aim

"The social point of view is . . . reemphasized . . . to make clear the relationship of the learning process to the social process. . . . Traits grow and develop as the child grows and develops in his total reactions, . . . they are part of the effect of every learning situation. . . . Personality is the individual's expression of his total self in a social order. . . . "Sympathy, freedom, authority, attention —in right amount given at the right time —all lead to . . . a balanced personality. In the light of this statement social participation is, therefore, the aim and purpose of the learning process.

"Thoughtful citizens expect schools to help guide boys and girls so that they become good citizens and valued members of society, . . . Too often teachers lose sight of this large purpose. . . . Mastery of facts and principles sometimes come to be considered ends rather than means to better living. . . . The facts and principles of science should not be taught to the end that those who have attended high school or college know things which are unknown to other people, but rather so that those who have studied science will meet the problems and situations of life with an inclination to base decisions on facts, to hold conclusions tentatively, to consider the opinions of others and to avoid prejudices and superstitions."

Then follows a discussion of six character traits, "the development of which represent acceptable aims of education." The cultivation of such characteristics "requires that the individual understand many things and be able to use many skills." If the individual is to "maintain his personal integrity, he must be able to make change accurately, to compute his accounts correctly. . . . Teachers must ever have before them as a guide the kind of personality which is worthy and valuable, and they must see its development as the fundamental aim of education. At the same time they must recognize that living in this desired way can only be accomplished through effective use of skills, facts, principles and generalizations. Knowledge is power which must be directed to the ends we wish to serve."

The bulletin points out that curriculum makers are insisting that understanding of such themes as, "Interdependence of all forms of life, . . . Man's need and capacity for adaptation, . . . Man's increasing control of nature, . . . Masses of men struggle constantly to gain freedom from the domination of the few," can, if "properly developed, fill out into emotionalized attitudes or character traits."

Successful education changes environment

"Education cannot carry out a program of making individuals better members of society without at the same time directly engaging in a program of bettering society." . . . "Learning takes place only in the interaction between individual and environment. The school which causes learning to take place will cause pupils to make an attack upon the environment in such a way as to produce real changes in the environment. It is only as one sees the possibility of social betterment that reacts to produce better individuals, who react in turn to produce a second social betterment, and so on, ad infinitum, that the enormous possibilities of democratic education can come to one's realization. The means for limitless improvement of society and of the individual are in this technique."

In-service training essential

The bulletin frankly recognizes the fact that many teachers cannot undertake the changes now being advocated without being educated to do so. The Oklahoma bulletins are designed to be used in the in-service training of the teachers of the state —to help them develop a point of view, begin local curriculum making, and adopt new teaching techniques.

Bulletin No. 2, **The Role of the Oklahoma Schools in the War Effort,** was issued in 1942. Those portions of it which hold good for postwar education are retained in Bulletin No. 3, **Oklahoma Schools Move Forward,** which was issued in 1945.

The program suggested is, in general, "a plan for in-service training for teachers and administrators. It is closely related to the community, and it takes into consideration many of the newer practices in education that directly concern the community as well as the school. If . . . well executed . . . our patrons will see a marked change in our school system, and those who appropriate funds . . . will be more easily persuaded that the school is rendering a dollar's worth . . . of service for every dollar spent.

"The needs of the postwar world have already impressed themselves upon the consciousness of curriculum planners. We have already begun teaching many things which formerly had no place in our classroom program," and "the newer aspects of many other subjects have been recognized.

"Teachers of the present and of the future will need a different type of training. First, there will be some newer subject matter to be mastered; second, the viewpoint of the teacher will need to be adjusted to changed conditions and newer services to be rendered. . . . Teachers need to become familiar with the principles of curriculum development and to learn how to apply them." The Indian Service began as much as ten years ago the in-service training of its teachers in the matter of curriculum planning by instituting local study groups and curriculum conferences which have continued to the present time. Ever since 1940, Indian Service Summer Schools have offered courses on curriculum and curriculum making workshops.

The plan of Bulletin No. 3 is to "present each problem, analyze it, and offer a solution and a plan for its practical application in any ordinary situation." To the acute social problems discussed in **A Guide to the Study of Curriculum,** are now added problems which grow out of World War II and its aftermath, one of which has to do with "the heritage of free development which our democratic social order offers." Following a detailed analysis of American democracy, the bulletin suggests that schools "should teach the value of our democratic principles," but recognizes the fact that "direct teaching does not gurantee learning." Teachers are advised that "many and varied experiences and activities must be set up in which the student may practice democracy. . . . But that is not enough. . . . An ideal situation would make the school the center for all community activities, open to use in the evening as well as during the day, carrying on throughout the entire year, and offering to citizens of the community all that they may desire in the way of study, discussions, activities, individual interest courses, and social planning for community welfare.

"Pupil planning is . . . one of the newer classroom practices," which, starts "where the pupil is, discovers his problems, in a given field, encourages all to participate, to make useful decisions, to feel responsibility for the program of the whole class. . . . It is democratic because all work together toward a common goal.

"Teachers may . . . organize groups of students to work on projects which not only pertain to the subject matter . . . but also assist in the organization, administration and morale building phases of school life where these correlate with the subject matter studied. Beautification projects, clean-up campaigns, safety programs, . . . community projects may be decided in this manner. . . . All good information should lead to corresponding action. . . .

"Another procedure which . . . increases democracy in the classroom is the formation of committees of students to study and report upon particular phases of a unit which the class decides to follow, . . . Membership should be a matter of free choice based upon the interests of the student. If the unit has been planned by the class, all students will probably participate."

Another important phase of democratic procedure, it is stated, is "free discussion of problems by the members of the class. . . . The teacher . . . must skillfully, but not arbitrarily, check partisan opinions and personalities, make judicial suggestions and summarize the general outcome of the class discussion."

Since the purpose of the school is "the production of democratic citizens through democratic living, . . . every teacher . . . must be alert not only to the student's scholastic progress, but also to his personality development, his emotional stabilization and his aspirations of the spirit. The final goal here is leading the student into a habit of self-evaluation by which he will freely and consciously set himself critical standards of work and achievement which he will be ashamed not to realize.

"The teacher is a leader, not a dictator; a counseler, not a commander; an expert in some things, and a guide along all paths of knowledge. The student is the important factor because he is the learner. He must be treated with sympathy, given responsibilities so he can develop—but not too many or too diverse responsibilities,— and respected as an individual whose opinions are important to himself, and for whose decisions he alone must take the responsibility.

"Student activities are an educative force equal in value to the more formal subjects in the curriculum, and often more powerful as character building agencies because they are more spontaneous and interesting to the students. . . . Insofar as these increase pupil responsibility, interpret the school to the public, or make our schools better centers of democratic living, they should be utilized to the fullest extent. . . .

In concluding the chapter on *Democracy At Work*, the bulletin discusses services to the community which schools can undertake, one of which is "making of surveys to determine needs and opportunities. Topics studied have been: racial distribution, housing needs, home conditions, industrial opportunities." Another project has been the "setting up of job-finding machinery" and this would "include a follow-up scheme which keeps in touch with students placed on jobs for several years . . . until they are settled in a chosen profession."

Elementary education in postwar world

"Neither educator nor layman is satisfied with the educational achievement of children taught in the traditional or the so-called progressive school. . . . There seems to be a growing demand . . . on the part of curriculum makers . . . and of many . . . thoughtful . . . persons outside the profession that whatever is taught in the elementary school should promote the socialization of the learner and prepare the child to meet life effectively now and in the future. . . . The three R's have been fairly well taught during the past through mechanical drill, with little meaning to the child, but the socializing factors, that are needed to develop personalities that will more adequately fit the child to shoulder his responsibilities in his world, have received too little emphasis. . . .

Some newer aspects of the curriculum which will need added emphasis are consumer education, conservation of natural and human resources, and democratic living."

Language arts

"For the most part our language development lacks motivation. . . . Society demands that we have people who can read and write well enough to transact their own business and keep necessary reports and records. . . . Educators today are no longer satisfied to teach reading without considering the needs of the children. . . . One of the . . . functions of the teacher is to study the children while they are engaged in worthy enterprises and help them read, write and spell as easily and effectively as possible in connection with enterprises. . . . If language is presented in a functional manner, much mechanical, repetitive drill for the whole class . . . becomes unnecessary. . . . The child should be given many opportunities to talk about things which interest him. . . . Natural writing experiences should develop . . . through meaningful situations created in the classroom, such as: writing invitations to the homes, to friends, to other school groups; writing reports, plays, outlines, poems, stories. Emphasis should be placed upon spelling only as it relates to the writing needs of the child. . . . Emphasis upon the mechanics of reading is now being largely supplemented by stress upon expression of ideas and thought. . . . Interest in books is stimulated . . . through library experiences, story hours, poem appreciation, and the dictation of children's own stories and poems, . . . frequent and regular opportunities to read for pleasure. . . . Opportunities for listening have increased with the development of the radio and the talkies. Conversation, using the telephone, and story telling are other lifelike situations which give opportunities for listening."

Arithmetic

"Research and investigation have shown that more children fail in arithmetic than in any other subject, that many children dislike it, that the elementary processes are taught without meaning, that inferiority complexes are developed while teaching is done in the abstract, and that drill taught before the child is aware of the need often becomes a detriment to the later use of numbers, . . . that schools have taught arithmetic skills but made no provisions for maintaining them. Too often, arithmetic is taught entirely unrelated to any of the experiences of the child. The child should see the need of arithmetic as it concerns his life, in his buying, selling, saving, weighing and measuring, counting, telling time, checking temperatures, comparing values, etc. Army and Navy officers, industrialists and others have voiced a common complaint that the arithmetic training given young America is inadequate "and thus "it becomes necessary for the school to recognize this and provide opportunities for the application and use of numbers on the child's level."

Natural science

"The great out of doors furnishes a million dollar laboratory for the development of the child's finer senses. . . . He must see the plant growth through sunshine and rain, . . . appreciate the barren tree as a necessity for the production of the red apple, . . . hear the music of the stream as it sings of its successes in turning the wheels, watering the crops, furnishing him his bath. . . . View the sun in all its glory as the source of all light and heat. . . . Many opportunities should be given for the child to read nature's stories in the origional edition; that is from nature itself."

Art and music

"Art education is important because it offers an outlet for the creative urge of all children. . . . An integration with social studies, science, reading and other school and community interests is valuable. . . . There are many life situations in which art values are involved such as: choosing a ribbon, a tie, a shirt . . . lampshades, a . . . gift; planning a garden . . . a party . . . selecting and hanging a picture, choosing a Christmas card, setting a table, etc. . . . The teacher should not evaluate the child's production in terms of her own standards, but in terms of growth and development of the child. . . . Art teaches balance and harmony, the ability to work with others, respect for other people's work and ideas, resourcefulness, appreciation of the limitations of materials, development of judgment, and emotional stability.

"Few subjects make more direct contribution to community life than music . . . Music furnishes a means for emotional and intellectual release. . . . Children can learn of the culture and characteristics of various peoples of the world through music. Their art, literature, poetry, nature, history, geographic relations, nationalities; each has been expressed by man's musical genius."

Social studies

"We are living in a global age. . . . A feeling of friendliness, of kindness and of tolerance must exist if we are to live in a peaceful postwar world. . . . Geographic relations should be developed in the lower elementary grades. It is easy to develop certain concepts, as: People who build houses with flat roofs live in a land of little rainfall; if they live in a country with a variety of building materials there will be a variety of homes." In this way the child "should see the relationship between the climatic conditions . . . the kind of work a man does, of clothing he wears. . . . The history learned should be that which will make the present richer and fuller in meaning.

"A well adjusted individual cannot emerge through the question-answer type of social science procedure. . . . The child must have many opportunities to learn through meeting social situations . . . within the classroom, if the school accepts its responsibility in training desirable citizenship traits. . . . Utilization of all of the community resources should be made if we expect socially minded boys and girls . . . to later find themselves as adult members of the community. . . . Every elementary teacher should plan many trips into the community with the children . . . to get firsthand information relative to the needs of the community" and also develop a "program of action toward correction of any problems discovered . . . that are within the scope of school."

Consumer education

"The child should learn how to spend his time, energy and money wisely . . . learn to invest safely . . . that wise buying is intelligent saving. . . . Planning and construction of the home, the selection and care of clothing, the care and repair of toys—these are illustrated units through which the thread of consumer education runs. . . . Some aspects of this subject have been taught under the guise of reading, science, social science . . . and health."

Conservation

"Conservation is using wisely and not wasting. It also means restoring and providing for the future. Programs should be set up in every elementary school that will enable children to engage actively in conservation activities. Units should be developed on such topics as: the use and protection of forests, wild animal life, how animals serve man and their need for protection; need for conservation of grazing and forage lands, how the child can help; minerals—importance in our daily living, how necessary is soil and needs for conservation; how plant life serves man and reasons for protection. . . . The laws of Oklahoma specify that conservation education be taught in grades 4-9. There is every reason why children in grades below the level set by law should be working, reading and experiencing conservation practices. . . . The child must be taught the care of clothing . . . toys, books, paper and supplies of all kinds. Field trips to the aquarium, forests, lakes, eroded countrysides and sections where conservation is practiced will surely be understood by the primary child if his thinking is guided before and during the trips that are taken."

Human resources

"Children should discuss why they need to keep fit . . . understand proper health practices, and the school should place the child in a healthful environment. . . . Everywhere and always, safety must be stressed in school. Children should put everything in its proper place. . . . Observation of light signals, road signs, road laws with reference to walking on the highways, and speed limit laws should be part of the daily school program. Other safety habits should be stressed, as: looking both ways when crossing a street or road, playing cautiously on playground equipment, clearing ground of all hazards etc. Children will work enthusiastically on lists of safety rules to be observed if given an opportunity."

Democratic living

"It is the obligation of the school to develop . . . a nation strong enough and interested enough in group welfare to cause the democratic way of life to really function. . . . Countless opportunities present themselves daily for the exercise of such democratic procedures as group planning, group discussion, group evaluating and other cooperative projects. . . . The teacher . . . must know the modes of living of the people, their liabilities as well as their assets. The vision of the best type of education yet conceived has, as a center of its curriculum, cooperative activities for individual and community improvement," and it does not ask children to be "content with studying about community problems," but rather it allows them to "participate in their solution. . . .

"Children should learn that they are living in a new age—the global age. . . . It is in the elementary grades where the child begins to learn the interdependence of man. . . . Each day he comes into contact with articles brought to him from different parts of the world. . . . He learns of the efforts required to make available to him an orange, . . . a raincoat, . . . the twine string in his pocket, the pan in which his mother made the soup for his lunch. . . . Racial and religious prejudices are not ordinarily formed after maturity, but at an early age. . . . Tolerance toward all races and religious groups should be taught all children of the elementary grades. . . . The school's basic role is the guidance of the assimilative process."

Changes in High School Inevitable

After a survey of objectives defined by the Education Policies Commission and the five values, constituting the American faith, to be preserved through education, as presented by the Commission on Teacher Education of the American Council on Education, the bulletin lists a number of expected future trends. It suggests that the reconversion period will return an unknown number of young people to high school for further preparation, that non-graduates servicemen may skip the secondary school and seek trade training, that schools will find these young people more mature, and that they may be impatient "with much that has characterized our secondary program to date and more receptive to the immediate functional program." It reaches the conclusion that "by any measurement . . . the secondary school is in for change" and adds that "when a democracy indicates that a change is coming, then educators had better look to their leadership lest others assume it."

A number of trends are noted as being apparent in curriculum revision. "Emphasis . . . is being given to postwar needs. The curricula are given more and more consideration to the non-college youth who usually amounts to 65% or more of the enrollment in any community, . . . to general education and vocational courses. . . . College preparatory courses may not be fewer in number, but . . . content is being modified in the general interest of all students for living in a democratic world.

"One method being used by a number of schools for meeting the diverse demands is the several track curriculum. A student may choose a college preparatory course, commerce, a general course, or vocational work. . . . Graduation from one of these tracks may be certified by a diploma, stating the field of preparation, or a general diploma is issued, accompanied by a certificate stating the special track followed. . . . A number of Oklahoma schools are following the multi-diploma plan.

"Another trend is the study and preparation by secondary schools to assume the task of caring for the problems for which the parallel federal agencies, N.Y.A., C.C.C., and W.P.A. adult education program, were organized. The duplication and obvious overlapping of work which characterized this parallel organization may be avoided if schools take vigorous action.

"The junior college . . . is one means of meeting the educational demands for . . . a more extensive vocational program. The 6-4-4 plan seems to be meeting the most general approval because of its more efficient use of personnel, buildings and equipment.

"Curriculum revision goes on by several means. . . . The introduction of new text books lends its influence to the revision and in too many instances is not for the best. Smaller schools adopt the . . . curricula of larger schools. Too many times these metropolitan revisions are not suited to the smaller schools and are not conducive to the best interests of the smaller community. . . . The objection to all is that they are fragmentary and don't arise from any whole viewpoint of the child, or of the community's needs. . . . The school and the community should plan a complete, over-all program and these fragmentary demands fall into their proper perspective." The bulletin insists that approaches to curriculum revision "should be planned and set in operation after a study of the local situation to lead to an over-all program and not to satisfy educational fashions."

Next follows a survey of trends in content and methods of presenting secondary school subjects.

English

"English composition and grammar courses are being made more functional, with more emphasis . . . on pupil needs and less to anticipate college entrance examinations. Course contents are being based on pupil needs for self expression in conversation, talking, writing, and listening. Pupils are being permitted to substitute for senior . . . courses, work in speech, radio, library science, debate and business English. Narrow and restricted literature reading assignments are giving way to the needs of the individual students who are being urged to develop personal reading tastes based on their own interests. More periodical literature is being used. . . . Instructors in English are finding that the correlation of history, music and pictorial arts adds interest and emphasis to their instruction. The growing interest in regional and local history has opened new vistas of creative writing for compositions as well as literary studies. Remedial reading has been included in English instruction in some schools. . . .

Mathematics

"It is safe to say that . . . all groups are agreed that basic mathematical skills and abilities need to be better taught and more thoroughly mastered . . . to the end that any normal child, going through the elementary and high school, will be competent to use accurately all of the fundamental tools of mathematics. . . . Pure mathematics is needed and will continue to be given to capable students. . . . Moreover, it should be clear that more attention is going to be given to social mathematics, including taxation, insurance, consumer buying, and budgeting, by all students regardless of ability. It is becoming evident that even a Phi Beta Kappa will need to stretch his dollar as far as possible."

Science

"The increase of the new materials of science will demand that people generally be familiar with them. However, not all students will study to become skilled scientists, but rather applied scientists. Another use for science which will stimulate its study in high school is in the field of recreation and hobbies such as: photography, flower culture, and amateur astronomy. . . . The branches of science will be more closely correlated with each other. They will be made more functional in that they will tie in more closely with related living. The sciences of biology, chemistry and physics will deal more with people and human problems. The curriculum changes will consist mainly of a change of emphasis in both content and methods. . . . There will probably continue to be much student interest in science.

Social studies

"We now have a growing movement toward combining the most important phases of several courses into one, or toward adopting units of learning in those areas of the social studies which deserve the greatest emphasis at present in our local school situation. A practice now finding much favor is the core curriculum plan, . . . units of learning, experiences, which all developing citizens should have, are pursued by all the students. . . . Students who wish to progress further in the social studies may elect courses which deal with their special interests." Some of the areas in which curricula will have to undertake specific training, if we are to act intelligently regarding the problems of the present and the future, are: "International or global relationships, Law and responsibilities in democracies, Social legislation and welfare, and Education for the air age." Each of these areas is analyzed.

Shop work and vocational training

"High school education is not considered complete without shop courses, sometimes in considerable variety. Radio, printing, sheet metal work, welding, airplane engines and construction, have all been introduced into our schools. The rural electrification program . . . offers a field which will employ many workers. The increasing use of power machinery on farms will call for . . . more . . . knowledge of the care and maintenance of pumps, tractors, combines and other types of farm machinery."

Business education

"Business education must be considered an important part of the general education of every student. . . . It should be incorporated into various courses at different levels. . . ." The bulletin makes it imperative that the child should discover pertinent facts concerning natural resources, the price system, distribution, budget making, economic geography, products of industry, and other important phases of our economic organization. He should know enough about commercial law, bookkeeping . . . to fit his personal needs whether or not he intends to follow a business career. . . . This general business knowledge can be emphasized at appropriate points in science, social studies, mathematics, English and commercial art. . . . To students who desire specialized training, our secondary schools should offer not only the usual courses, but opportunities . . . to engage in actual business experiences. A class which handles the stencilling of all school materials, or runs a school bank, gives the students this kind of actual business practice."

Home economics

"Preparation for effective participation in home and family life should be part of the general education of all youth . . . some of the training needed for personal home living and homemaking is also basic for success in a wage-earning job. Education which results in better adjusted, more attractive, friendly, cooperative individuals who spend their money wisely, select becoming, suitable clothes, and care for their health will also be an asset to both the individual as a wage earner and to her employer. . . . Certain homemaking skills can also be used in wage-earning occupations, as: food preparation and service, dressmaking, care of children, nursing, and domestic service. Knowledge of foods, textiles, clothing and design, needed by the homemaker, is also important in the retail selling of foods, clothing, yard goods and home furnishings.

"Beyond general education in family living, . . . vocational homemaking education is directed toward the development of those abilities for which the wife and mother is usually responsible, . . . parental responsibilities as well as many phases of management. . . . Extended employment of homemaking teachers beyond the school year, and the encouragement of pupils to carry out projects in their homes are helpful in such a program based on cooperative relationships."

Health education

"A good health program should have these general objectives: correction of physical impairments; prevention and control of communicable diseases; good nutritional practices; prevention of accidents; first aid care; daily program for balanced living; development of sound mental attitudes; and sex education founded in the latest instructional findings. This program would necessitate . . . employment of community resources. . . . Schools are integrating health education with courses in social studies, the sciences, and homemaking, physical education, and athletics. . . . The trend in athletics, physical fitness and physical education is to measure their worth in terms of what they contribute to the general health education program. . . . Such an evaluation will modify many of the prevalent practices in these fields.

The "life approach" curriculum

"Leading educators have realized . . . that conventional courses . . . presented in . . . traditional . . . schools did not root in the life experience of the student, and therefore failed to arouse interest because they did not meet a *felt need*, . . . had too little correlation with the pupil's everyday life outside the school. To remedy this situation, an increasing number of schools has adopted a plan of procedure, for at least part of the school day, which is . . . called the *core* curriculum or the *life approach* curriculum."

The bulletin then quotes from a description of this kind of organization at the Fairview Public School in Alabama. "English and social studies form the nucleus of the core curriculum . . . however, in the core program, the subject matter lines have been abolished . . . and the organization is about life problems. It is the basic education required of all pupils. It consists of problems that are found within the scope of the experience of the pupils. The pupils help plan and direct the inquiry into these problems. They have an opportunity for individual and group activities. Pupils are encouraged to assume significant responsibilities in accord with their ability to discharge these responsibilities. The pupils involved in this program have increased opportunity for self expression and for adjusting to their individual interests.

"Frequently one teacher handles the core subjects, giving the students under her care a greater amount of time than the usual subject matter teacher can have. This increases the guidance possibilities because the teacher can know the pupil's interests and handicaps much better. . . .

"In addition to this common body of learning, the curriculum offers subject matter courses . . . to satisfy the special interests of the students."

Conservation education

A chapter of Bulletin No. 3 is devoted to conservation education and points out that many states have developed integrated units on conservation for use both in elementary and high school, and that teachers are also including the study of conservation in the problems of daily living. Emphasis in conservation education includes "the problems of renewing our forests, saving our soil, saving our water supply, improving the methods of oil production, and promoting an international plan of cooperation in conservation." A suggested method of approach to conservation study is "the regional approach. The advantage . . . is that it offers an opportunity to study a single problem in its regional setting, and makes possible a unified program adapted to local needs." Detailed suggestions are presented for units of work for the several age levels.

Guidance

From a chapter on guidance come these statements. "There is a growing unanimity of opinion that the whole child is being educated at any stage of his school experience. His growth as an individual is as a whole and not by departments, divisions or subjects. . . . It is the concern of guidance to seek out . . . individual talents and encourage their development in the framework of the educational environment. . . . As experience with . . . guidance work increases, it becomes . . . apparent that . . . all of education is guidance, that teachers must leave the narrowness of their subject fields and become teachers of children. Though the public may at times clamor for more of the 3 R's, they are more concerned with the end result, the well balanced, integrated graduate who is not only the possessor of training in the fundamental (skills) but the possessor, too, of knowledge and training in democratic citizenship. Children must be led to *being* not just *having*."

A chapter is devoted to the discussion of pre-school education, and adult education in which veteran's education and rehabilitation are considered. Another chapter presents the need for interpreting the school to the community through a public relations program in order to help the average layman understand the justification for new school courses and new techniques of teaching. A final chapter deals with the evaluation of child growth—physically, socially in work habits and in basic skills and other school subjects. It has suggestions about student records and reports to parents; for the latter it is proposed to include a short summation of information in addition to any conventional system of school marks. The bulletin ends with a brief presentation of the use of the panel method of discussion and of the workshop as helps toward the in-service training of teachers.

Indian schools have pioneered in some of the fields of endeavor now proposed to teachers in Oklahoma public schools. In other fields, not yet explored, experimentation by both public and federal schools will produce data for scientific evaluation of their worth.

OREGON

From the **Handbook for Oregon School Directors** comes this statement, "Curriculum study in Oregon has been stimulated by a number of conferences and by the work of the Oregon State Teachers' Association Committee on Improvement of the Curriculum. . . . Courses of study for the state are produced by volunteer groups of teachers under supervision of the State Department of Education. Curriculum progress is aided by constant consideration and reconsideration of teaching methods and materials by active school workers."

In the **Social Studies Bulletin** of 1937, it is stated that, "A course of study, like a textbook, should be handled with discretion, studied with much thought and, if followed at all, followed with imagination. . . . The teacher should study her local situation, the ability of her pupils and the availability of materials. She should then study the course of study, and plan her own work in large units. . . . It is understood that no child should be required to cover everything in the course of study. . . . The activities suggested will develop with the solution of problems. . . . The teacher who slavishly follows a ready-made course of study which does not meet the needs of her school is not far advanced over the one who is a slave to her textbook. . . . One of the purposes of the course of study is to meet the need for information on the part of school personnel who do not have any other opportunity to become acquainted with general school policies and who have few contacts with experienced professional advisers."

The **Guide to the Program of Studies in the Elementary Schools,** 1945 edition, says, "Differences in pupil ability, differences in ability of teachers, and differences in the length of the school year make it inadvisable to specify page by page the progress which teachers and pupils should be making in subject matter content. To do so would be a contradiction of our accepted philosophy of education which has developed in part as a result of scientific findings in education . . . an integrated program is advocated for the primary grades. . . . No area has maximum educational value in and for itself. All develop their maximum meaning only in relation to one another." Since education deals with human beings and many variables enter into the picture, "it cannot be repeated too often that . . ., if we are to succeed as teachers we must take our pupils where we find them and begin to teach from that point on. . . . The fact that a child has reached his sixth birthday is in no way indicative that he is ready to participate in the complicated process of formal reading. . . . In order to make a prolonged period of reading readiness training possible for those children who need it, there must necessarily be administrative backing; otherwise uninformed patrons and school boards may demand that every child complete the first grade within a year's time, and the teacher is held responsible for crowding the child . . . whether he is ready or not. . . . A glance at the basal texts will show the need for knowing about pets, animals, names, members of the family, ways of traveling, autumn experiences with leaves and their coloring, birthdays, etc., all of which may be a part of the science and social studies program."

That the need for reading readiness training may persist beyond the first grade is recognized. "Although a few may be able to do reading of second reader difficulty, the first grade teacher has done well if most of her pupils can read satisfactorily on first reader level." The second grade teacher must "begin with any second grade pupil where the pupil can read with a fair degree of success. This may be on the pre-primer level or any other level, including materials of a second reader difficulty or beyond." Social studies help provide a center of interest for "meaningful language situations and reading experiences," and this center may have to do with the concepts of the community. A second grade class "visit to the market, mill or farm, preceded by planning, reading and discussion, and followed by creative construction and evaluation of activities, is typical of the enlargement of meaning which accompanies the social studies work." Social studies for the following grades put emphasis on the expanding environment, as for instance "the story of the way the land has changed since the coming of the pioneers." The text books are used as a basis for the development of units of work, and for each unit are listed suggested pupil activities, many of which call for muscular movement as well as for mental exercise; for example, "Make a weather vane, climb a hill, visit a valley, run experiments showing what the force of water can do,make Indian masks of paper-mache."

The guide points out that one of the marked characteristics of the intermediate grades is that differences between individuals broaden, and teachers are warned to give more attention to individual variations. "The program . . . should be integrated . . . in the content subjects of language, social studies, science and health." The desire of children of this age level to work together "can be taken advantage of in many cooperative activities. . . . The language arts include . . . listening, speaking, reading and writing. . . . They cannot be learned apart from one another, but must . . . develop together. . . . One half of the language activities of this group should be oral in nature." In the social studies of intermediate grades the teacher needs to be concerned with developing the child's ability "to see the bearing of one piece of datum upon another and thereby gain something different from, yet added to the original information—a relationship."

For seventh, eighth and ninth grades, the guide advocates still more attention to individual differences which "become more pronounced at this time largely because of sex interests," the desire of "being accepted by his peers" and of establishing his "status with adults. . . . If the child has not matured socially, mentally and physically with the average of these grades, the teacher recognizes the fact and provides for it."

Other pronouncements are, "The material and activities suggested . . . are more extensive than a class of average ability can cover in the alloted time. Selection and adaptation will therefore be necessary. Teachers will find ample material for the enrichment of the course for especially able pupils as well as a variety from which selection can be made for the less gifted. . . . Emphasis ought to be on social functioning rather than on memorization of facts or the covering of a large body of material in a certain length of time. . . . It is not desirable that every child read from the same book for it is largely by being able to make a special contribution that each child feels the importance of his opinion, and so finds pleasure in his work. "At the conclusion of a period of research, the class will convene to discuss the problem,"—reports, floor talks, results of activities shown and discussed, further activities planned. While this kind of teaching requires that teachers learn to use it skilfully and pupils accept their responsibilities in connection with it, while it takes very careful planning, "it more than repays for the effort in increased interest, growth in judgment and the development of social attitudes."

Comments from the Oregon course of study for the secondary school are similar to the objectives and the approved procedures for Indian schools. "Trends in high school English are toward functional use in written and spoken expression and toward appreciation rather than formal study of literature. . . . The social studies are tending to emphasize application to modern problems rather than knowledge for the sake of knowledge. General, practical courses in mathematics are displacing the more technical and specialized courses in Oregon high schools In science, also, the trend is toward broader and less specialized treatment of the subject matter. Enrollment is increasing in the more directly vocational subjects; bookkeeping, shorthand, typing, industrial arts, home economics and agriculture. Music and public speaking, once considered *frills*, are becoming an accepted part of school programs. . . . One trend is to "utilize a core of common materials for all, but adapted to the varying abilities and aptitudes of pupils," and another trend recognized the need for more . . . pre-vocational activity basic to later development of skills and technical training." The basic program of studies must be flexible to allow its "adaptation to meet the conditions which obtain in the various communities of the state. . . . Some communities are predominately rural, other urban; some schools must serve agricultural communities, others are located in industrial centers. . . . Everyday living makes more frequent demands for speaking than for writing. The manual places emphasis upon development of skill in speaking activities. . . Language is the means of communication with the emphasis on thought rather than on the form of expression . . . ."Teachers ought to help students "to apply what they learn to personal and current human situations. When this cannot be done, the significance of what has been studied is open to serious question." Trends in high school mathematics are toward courses in which emphasis is on "the use of mathematical procedures previously acquired rather than on the learning of new procedures." This work is "intended primarily for non-college and non-technical pupils." Algebra should be "included in . . . every high school which prepares for college." Special courses have been prepared "for students who recognize a need for geometry in either professional or vocational study. . . . The needs and interests of the child and of the community should be dominating factors in determining the choice of units" of science to be studied. The teacher can well make use of the high school student's intense interest in himself, in those about him and in his natural environment" in developing those aspects of biology to be taught. It is suggested that much health education can be given through biology courses. The course in physical science departs from the "traditional science course" and places emphasis on "an understanding of certain scientific principles" if students are to "become intelligent consumers of goods and services. . . . Experimentation and laboratory procedure which do not contribute to this end are of questionable value. . . . It is suggested that some of the experimentation be done with the more common household electrical and mechanical devices." The purposes of business education may be stated as consumer, pre-vocational and vocational. All citizens should "learn to be intelligent buyers and sellers with due regard for both their own business rights and those of others. They should know when, where and how to seek expert counsel in business affairs." Such courses should be taught primarily with "consumer rather than vocational emphasis." They do have, however, "worthwhile prevocational values." Speaking of home economics, the manual has this to say, "The program which meets the needs of girls today is the one that recognizes the importance of learning in management and relationships, as well as the development of skills. . . . The work included in any given year should provide experiences in various aspects of homemaking rather than specialization in one type of activity such as foods or clothing." Industrial arts in the secondary school "should not be considered as vocational, . . . at the same time it has a close kinship to trade education because it lays an excellent background for those . . . who will continue with a vocational-industrial program." Smaller schools have turned to "the multiple unit or general shop" which might include "equipment for drawing, wood-working, general metal work and elementary electrical work."

Trends in public education in the secondary schools of Oregon are in the direction of relating subject matter learnings in practical ways to the real business of living and earning a living. These trends have already become established policies and practices in many schools in the Indian Service, and their acceptance in both principle and practice is well under way in the majority of the remaining secondary schools. With such changes rapidly taking place in public school education, students in Indian schools will meet less and less inconvenience when circumstances make it necessary for them to transfer from a federal school to a state public school, or vice versa.

SOUTH DAKOTA

The **Course of Study for Elementary Grades** for South Dakota, issued in 1943, was prepared by "a large number of teachers and supervisors."

The Introduction begins with the statement that "in almost every community forces are at work to discredit or critcizes the . . . work of the schools." A number of other state departments of education whose documents have been reported in this series have frankly stated the fact that any school system is bound to meet with criticism, especially in periods of reactionary thinking which so often parallel periods of political and economic unrest. Some of the criticism—just or unjust—can "be laid at the door of the classroom teacher. . . ." Some of the blame must be shared by those who have "the responsibility of providing adequate financial support for . . . a defensible program of education. . . . Leadership in educational circles must share the responsibility because it has not provided for continuous revision of the curriculum."

Educational philosophy and some guiding principles for South Dakota schools are stated as follows: "A school curriculum must include patterns for democratic procedures in harmony with adult group thinking and living in this country. . . . A program in which the child shares in the execution of the planned activities contributes most to the growth of the individual and the group." The work of the home, church, school, and other community agencies "should be synchronized for a single purpose of providing a well rounded education for every child. . . . There must be provision for freedom in expression and freedom of activity, provided this freedom does not encroach upon a degree of orderliness conducive to a good learning situation.

"The curriculum should consist of those materials that are functional in the life outside. . . . Individuals differ in interests, attitudes, appreciations and understandings, habits and skills, and in capacity to learn. Since individuals are born with different endowments, they develop at different rates. The school must provide differentiated education for a variety of capacities and needs." Experiences must be planned which are "essential to the development of each individual into a useful and well-balanced social being. . . . Activities should be selected with real educational aims and objectives to be kept constantly before the worker. The purpose of carrying on such a project should be paramount."

The course of study must be developed in such a way that "the inherent advantages of the one-teacher type of school can be utilized." Some of the advantages are: "the family-type group arrangement; greater possibilities for activities that are true to life; and a better situation for the development of an integrated curriculum. . . . Whenever possible the vertical type of unit should be used in the smaller schools . . . this organization will afford an opportunity for group participation in activities that would be impossible with the use of the horizontal unit.

"If a teacher were to teach every subject in every grade of an eight grade rural school it would mean a total of 78 classes during one day to be squeezed into . . . 330 minutes of instruction time or an average of less than 5 minutes per class." Considerable space is given to suggestions for "alternation, . . . combination . . . and joint class conferences," as means of cutting down the number of classes to be taught daily.

The South Dakota course of study is organized under these headings: The Language Arts programs (reading, literature, oral and written composition, spelling, and penmanship); Arithmetic (informational, computational, social); The Social Studies Program (ideas that are desirable as helps to the child in his attempt to understand contemporary adult life); History (survey of forces and events which led to the coming of Europeans to America, and of the main currents in the development of the western hemisphere); Geography (survey of the relationships between people's way of life and their environment); Civics (duties and responsibilities of the individual in regard to government, with a section on cooperatives and one on character education); Physical Education (large muscle activity including rhythmic activities, story plays, mimetics, games, stunts, and corrective work); Science and Health (particularly the natural sciences as helps to man in cooperating intelligently with nature); Art and Drawing (their functional use); and Music (appreciation and functional participation).

Under each of the above are listed . . . Concepts . . . or . . . Content . . . to be understood, and . . . Activities . . . for both pupil and teacher designed to vitalize the learning process.

From a large section devoted to the philosophy of language arts instruction come these comments: "Reading and language skills should be practiced and . . . developed through integrated activities which are meaningful. . . . Situations must be utilized in which children enjoy rich experiences through play, construction experimentation and exploration, and through informal activities where freedom of conversation is encouraged, and social need is kept alive. Language skills and appreciations will grow best in informal situations and under the guidance of sympathetic and understanding teachers. Wholehearted effort and joy in accomplishment never thrive in a cold, formal classroom atmosphere. . . . A reading lesson may be the stimulation for a dramatization. Would not the dramatization involve organization or outlining, vocabulary enrichment, and speaking? . . . The children will be learning reading; they will be learning composition; and they will recognize a need for both. . . . The children may be taken freely to the content subjects for motivation of their language and reading. . . . By assigning the more simple responsibilities to younger children, an entire school may be included in many of these arts activities. In a newspaper project the younger children may dicate their news items and stories to older children to write. . . . Older children may organize and plan materials; they may write stories, editorials . . .; and often they enjoy reading. . . from the newspaper to the little children. . . .

"At times the entire group may participate in excursions, programs, plays, book reports and construction projects. From these activities each child will experience according to his own background and capacity for growth. . . . A parents' day program may be planned and carried out; or a community history may be compiled. Keeping a school diary provides another opportunity for children of different levels to work together. By participating in such projects children will be acquiring information, skills and abilities; and they will be living the democratic way for they will be learning to work, to assume responsibility and to cooperate. . . .

"In all teaching situations the language arts program must be presented in terms of the individual child. . . ., fitted to the child —his personal characteristics, his interests, his potentialities, and his needs. . . . Why shouldn't a poor reader of the sixth grade read books of fourth grade level, if the books have content interesting to him? Why shouldn't he at times receive instruction with the fourth grade reading class? And why shouldn't a superior reader of the fourth grade read with children of the fifth grade? This does not mean that he would be promoted to the fifth grade. . . . In planning for individual development, opportunities for self evaluation . . . must be provided."

The point of view expressed above in regard to language arts applies equally to other fields of learning.

In presenting the social studies, history, geography, civics, science and health programs, a number of units are suggested in outline form for each grade. While some of these units deal narrowly with topics such as *Central States, The Atmosphere,* many deal with broader, more interrelated area of living—for instance, *Community Relations, From Buffalo Pasture to Statehood, Work in Towns and Cities, World Trade, Safety and Machines.*

A special section is devoted to the necessity for study of Cooperatives, and a fairly detailed unit of work on the eighth grade level is presented. "On account of the prevalence of cooperatives in nearly every community, and an increasing demand for them, pupils should know something of their origin and should have an understanding of the types of cooperatives, their aims, and their methods of functioning." This is an illustration of South Dakota's determination to adjust the school curriculum to local conditions. Many Indian schools not only present factual material about cooperatives, but have students organize and conduct actual cooperatives under the guidance of the staff.

The guiding principles stated for the Science and Health Program suggest some of the newer emphases which schools are giving to these matters. "The natural sciences are primarily concerned with trying to get man to better understand the laws of nature so that more intelligent cooperation with nature will ensue, and as a result man will have a more comfortable home surrounding. . . . The basic philosophy is to give recognition to the fact that the experiences of the child are more important than factual leaning and that the science program should include abundant opportunities for observation, experimentation, discussion of probems of interest to pupils and life as it is lived in the state." Some of the applications of science to everyday life, which pupils who complete the elementary curriculum may be expected to understand and appreciate, are: "practices . . . essential to . . . individual and community health; . . . ways to reduce accidents and to apply first aid . . . the proper and intelligent use of various modern machines and electrical appliances, "proper use and control of fire. . . . Conservation of our natural resources, particularly, soil, water, wild life, minerals, trees, public parks, etc. . . . intelligent understanding of types of domestic animals and care of them, of better farm practices advocated for our agricultural regions, of kinds of vegetation that can be grown in, and are beneficial to South Dakota . . . those that are considered poisonous and obnoxious weeds . . . interest, appreciation and intelligent reactions for life on the earth that is affected by the interrelations of the earth and the rest of the universe.

"The committee has accepted the *Expanding Concept* philosophy, wherein a continuous and integrated sequence of concepts or information from the early grades . . . through high school is essential. . . . Three major areas were arbitrarily selected. *The Earth and the Universe, On the Earth* and *Energy and Mechanics.* One of the fields in the area of *Energy and Mechanics* is electricity, and this is chosen to illustrate how the expanding concept idea will work. In the primary grades children will become acquainted with such concepts as electricity does work for people, damages by fire or death as a result of shock are frequently caused by not knowing how to use . . . electric appliances." In the intermediate grades will be developed these types of concepts; "electricity flows when a circuit is closed . . . tractors, trucks, automobiles, etc., run when electricity flows." In the upper grades pupils will be led to understand that "there are different kinds of energy; radiant, chemical, mechanical, etc., . . . with increase in the use of energy our problems have multiplied and become more complex." The committee believes that "this type of development will tend to prevent exact duplication of the treatment of any one particular phase of knowledge from one grade to another." The committee has listed activities that will help children better to understand each concept, and "it is recommended that these activities be used, provided the teacher is not acquainted with an activity she considers better."

Every teacher should look into the local "possibilities of securing helps in the teaching of science. These may include . . .; (a) Fire department . . . for posters and bulletins on fire extinguishers, pulmotors, fire hazards, and fire protection. (b) . . . pupils . . . who may have . . . toy electric trains, toy steam engines, radio receiving sets . . . transmitting sets, and Meccano sets. (c) Creamery: pasteurization of milk and the Babcock test. (d) Home: simple machines such as pulleys, levers, kitchen utensils, electric devices, farm lighting plants and sewage disposal. (e) School building: fire protection, heating systems, ventilation and management of fire. (f) Any conservation agency relating to soil, water, trees and wild life. (g) Any agency interested in better live stock development or better plant life development." Other sources of assistance are "the doctor, dentist, telephone exchange, water department, automobile repair shop, railroads, light and power companies, and business men." All have valuable information for schools, and appealing to them for help "is a splendid way of showing them that we are interested in present day living."

The Foreword to **Course of Study for Elementary Grades** states that "The goal which should be sought is that of developing school children who will learn to appreciate and exemplify the democratic way of life through learning *How to Live* and *How to Make a Living*" If this statement is accepted, it follows that the curriculum of certain schools in certain regions of the same state must be differentiated from that of schools located in another and different natural or cultural environment. Another statement points to the same conclusion. "Units of instruction should be flexible to meet local environmental conditions."

The curricula of Indian schools in South Dakota—because of the large number of non-English-speaking beginners—must depart at points from the language arts and arithmetic goals suggested as desirable of achievement for the several grade levels. In the introductory section which precedes lists of specific goals, and which is again repeated in each detailed list of goals for each grade level, is a statement in approximately these words, "This plan is merely suggestive. Teachers must make adaptations to provide for the needs of their particular groups, and of individual children," and in some cases the statement is printed in heavy type.

The question of promotion is considered at several points in the volume. "The basic instructions . . . will be based upon the list of minimum achievements or evidence of growth for the various levels of learning. . . In no school, however, should these . . . be used as the sole basis for promotion. Promotion must be determined through a consideration of the child's needs, and his whole development. The evidences of growth are to be used as guides to insure that each child receives a certain core of language and reading experience in sequential learning order. . . . If the language arts program is to meet the needs of all children, promotion policies must be modified. Most school failures are failures in reading. To reduce these failures, it is proposed that schools adopt a flexible plan of classification that permits the frequent regrouping of pupils, and the use of corrective measures. . . . Pupils will be encouraged and stimulated through a realization of their individual growth, rather than through comparison with other members of the group. We must help children to realize the satisfaction that comes from successful effort rather than to feel the discouragement that results from failure and the repetition of the work of a particular grade. . . . Classifying pupils according to a flexible grouping plan which provides for individual growth will help eliminate many school failures."

Like practically all present day state courses of study and like the Indian Service, South Dakota stresses the importance of pre-reading experiences. "There is agreement among authorities that there are different types of readiness which must be developed before the child is equipped to read efficiently. This development includes the product of the mental, physical, social and emotional factors resulting from experience, guidance and training in the home and at school. . . . The first 6 to 12 weeks" (of the First grade year) should be spent in getting pupils ready to read. Not all pupils need this length of time yet others need more."

There appear to be no fundamental differences between the objectives of Indian education in South Dakota and those of public education in the state. Actually there would be no greater divergence between what goes on at an Indian school and a public school—provided teachers in both were carrying out approved philosophy and methods—than there would between a public school in the Red River Valley and one at the edge of the Badlands.

TEXAS

Texas public school authorities have long been interested in the question of what to do with the child who enters school without the usual amount of practice in hearing and speaking the English language. They have realized that such children cannot be expected, in their first years in school, to accomplish the same work that is planned for children who speak English as their native language. The state Departments of Education in New Mexico, Arizona, California, and certain northern states with large Indian and Scandinavian populations, hold the same point of view. The Indian Service, too, has tried to get its teachers to realize that they may do irrepairable harm to non-English-speaking beginners if they attempt to plan or to measure the progress of these children by the same standards of achievement which may be set for most English-speaking beginners.

As early as 1932, Texas issued a separate course of study for non-English speaking children. This bulletin says, "Since our most important aim is to teach the child practical English, our first task is to help him acquire, as rapidly and as naturally as possible, the English words or sentences for which he will have the most immediate and urgent need. . . . It is not always realized . . . that the problem of the foreign-speaking child . . . is exactly the same as that of the American child who is trying to learn French or any other foreign language." The teacher must take into consideration the fact that as far as acquiring the ability at school to speak English is concerned, "the pupil is in the position of a child who has not yet learned to speak. . . . The conversational forms of language can be learned only by conversation. . . . The principle to guide us . . . is that lessons must obey the natural law. A haphazard, disconnected, unrelated group of words and sentences must end in tedium, discouragement and despair. . . . Instruction of the foreign child must be interesting, entertaining, lively and as concrete as possible. . . . This must be accomplished by means of objects, pictures, charts, singing games, songs, finger plays, and other helpful materials."

The El Paso Public Schools published in 1936, **Teaching English to the Spanish Speaking Child in the Elementary Grades,** by Lucy Claire Hoard. In 1945, teachers of the El Paso public schools participated in a summer workshop sponsored jointly by the Office of the Coordinator of Inter-American Affairs and the Texas College of Mines. Recognition of the value of work already carried on by the Indian Service was shown by the selection of Mrs. Hildegard Thompson, Supervisor of Indian Education, as Director of this workshop, which produced, **A Manual of Aids and Devices for Teaching Beginning Non-English- Speaking Children.** (1)

In the Indian Service, the Navaho Reservation is one which has a major problem in the education of non-English-speaking children. A pamphlet prepared by education supervisory personnel of the reservation—**Teaching English to Navaho Beginners** (2)—devotes some 40 pages to suggestions about types of activities, materials, songs and games for use in teaching non-English - speaking beginners in Indian schools.

The following excerpts are from the Texas materials, and are compared with statements from Indian Service publications.

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(1) Published by authority of the School Board of the El Paso Public Schools. 1945. $1.00.

(2) Navaho Service. Window Rock, Arizona.

Texas: "Those who understand little children can appreciate something of the feeling of bewilderment and confusion which the Mexican child experiences on entering our schools for the first time."

Indian Service: "His first great need for English begins the day he enters school. He is faced by an entirely new environment. He begins his first experiences with modern housing and equipment. The school building is quite a contrast to his friendly hogan. Showers, lights, toilets, refrigerators, and heating systems are sources of mystery. Even the food which is placed before him at the hot lunch period does not have the satisfying taste of his familiar coffee, mutton and fried bread."

Texas: "Since it is the responsibility of the elementary school to guide the experiences of the child so that the best learning results, it should be concerned with the socio-economic problems of the people it serves as well as with the teaching of democratic ideals. This concern should be reflected in the curriculum and in the human relationships between teachers, parents and pupils. The curriculum content should be developed out of these socio-economic problems. Efforts to teach the democratic ideals by precept and actual practice should be included in all school activities. A stimulating environment that challenges the curiosity and interest of the child and his best efforts is the outstanding contribution of a community-conscious school."

Indian Service: See numerous articles in **Education for Action.**

Texas: "The school program should take into consideration the total development of the child: namely, the emotional, physical, and social development as well as his mental and educational development. . . . Major objectives: (1) To develop health, sanitation and safety habits; (2) To develop desirable social habits; (3) To develop basic number concepts; (4) To develop manual and physical coordination; (5) To develop the desire to speak English; (6) To foster inquisitiveness and curiosity; (7) To develop creativeness in children; (8) To develop appreciation of the arts."

Indian Service: "Objectives for Navaho beginners: (1) Development of oral English vocabulary; (2) Development of desirable sanitation and health concepts and habits; (3) Development of desirable social habits; (4) Development of basic number concepts; (5) Ability to do problematic thinking; (6) Development of manual skills and physical coordination."

Texas: "Developmental rather then corrective teaching should be stressed. Vocabulary should be limited and presented slowly enough to be assimilated. In this way, many errors in the use of English can be prevented."

Indian Service: "In the teaching of language, all teachers, both new and old, are likely to introduce vocabulary too rapidly, thus neglecting the repetition necessary to fix oral symbols."

Texas: "The correct form is learned from the beginning and enough time is allowed to fix it in the child's mind."

Indian Service: "Insist upon the correct form from the beginning . . . The teacher should train herself to be alert to incorrect speech habits of beginners, and she should exert every possible effort to secure correct pronunciation, by teaching a child how to make the correct sounds, and by providing sufficient practice to train the speech muscles correctly."

Texas: "Meaningful concepts are essential to the teaching of language. Words are merely labels to name concepts. Meaning is developed by the use of concrete objects and first-hand experience followed by repetition and drill."

Indian Service: "He has learned the use of his native language by the same process that children everywhere learn language. He has built up concepts through experiences, and then from his elders he has acquired appropriate labels for naming his concepts. . . . For the beginner, school life presents many new and perplexing experiences. He must do more than merely learn the English equivalents for his Navaho vocabulary. His new environment demands that he become acquainted with new materials and new ways of doing things. From these new experiences, he develops new concepts which also must be labeled by oral English symbols."

Texas: "Vocabulary should be developed systematically and at a rate in keeping with the child's ability to learn. . . . The teacher should keep in mind that the use of many words that have the same meaning is confusing to the child."

Indian Service: "The teacher of beginners must realize the added demands that the new environment makes on learning for the child so that she does not set a pace for him that is beyond his learning ability. She must use care in introducing English to him so that his is an orderly development based on an awareness of the complexity of the new environment, and geared to the learning ability of the child."

Texas: "Children relive and broaden experience through play. To add content, the teacher should give the child new experiences and ideas."

Indian Service: "A room for beginners should be arranged to provide ample space for the assembly and use of play materials." Then follows nine pages of suggestions on the use and purpose of play.

Texas: "Suggested Room Setup: (A) Play center, (B) Work center, (C) Music center, (D) Library center, (E) Science center, (F) Beauty spot." Each of these six headings is followed by suggestions as to materials needed and how to organize and use the materials in order to develop the desired outcomes.

Indian Service: "English, as much as possible, should be taught through conversation in meaningful situations. . . . The teacher's part is to provide a variety of experiences that will enrich the background of each child. Suggestions for organizing the classroom: (A) Play corner, (B) Work corner, (C) Story and Picture Book Library, (D) Science corner, (E) Number corner."

Texas: "Although the average Mexican child, on entering school, has a Spanish vocabulary of two or three thousand words, only some 350 English words can be taught at this level." No reading is outlined for the first school year.

Indian Service: "Care should be exercised to develop an adequate vocabulary. . . . Oral language development should precede written language. Reading specialists point out that an effective reading program must have its basis in oral language. . . . For Navaho beginners, this pre-reading period in which emphasis is placed upon oral vocabulary, will require at least a year's time. For that reason seldom will the Navaho beginner be ready to read before his second year in school."

Both systems recognize the adjustment the non-English-speaking child must make to the new and strange environment represented by the school. The above quotations point up similarities in point of view and likenesses in directives to teachers. They show adherence to these principles:

1. Non-English-speaking children need first to learn English, and cannot therefore, begin at the same starting place as the English-speaking child.
2. The total development of the child should be planned for. Health habits and learnings and social attitudes, for instance, are as important as is purely academic learning.
3. English is best taught by providing the child with interesting activities, out of which is developed an English vocabulary.
4. Play is important in the life of the child, and its importance should not be overlooked in the classroom.
5. A colorful classroom filled with interesting materials is essential to effective language learning.
6. Vocabulary should be limited and systematically presented in order to keep it within the learning ability of the child.
7. Adequate child development in oral language precedes reading. At least a year of oral English is advocated before beginning the teaching of reading.

It is worth noting that Texas educators realize the value of adjusting the course of study to the needs of the non-English-speaking child. Such a child is not expected to pursue the same course of study as the English-speaking beginner.

The question sometimes asked is, "Why aren't Indian Schools like public schools?" The answer is that they **are** like public schools—public schools which have problems similar to those of Indian schools—public schools which believe that the child and his total development are of first importance.

UTAH

The State Department of Public Instruction issued in 1941 **A Teaching Guide for the Elementary Schools of Utah.** In 1938-'39, the elementary division of the state Curriculum Committee prepared statements of trends in elementary education. The following year, guiding principles in local curriculum making were drawn up, with many school districts participating. From these studies State Elementary School Objectives were compiled. In 1940-'41 the task of "bringing theory and practice closer together" was undertaken. Districts were encouraged to submit written descriptions of worthy group, classroom, school, or school-community experiences. Teachers listed problems related to the elementary school. Practically every district contributed. In 1941, with the previous studies as a foundation, some 125 elementary school workers produced the present guide. It provides the fundamentals of "an education program devoid of the elements of prescription and unnecessary standardization," and ample opportunity for "adaptation to local needs and conditions." It is to serve in local schools as a "stimulus for group study and as a pattern for curriculum construction activities."

Among stated objectives for Utah schools are: "Provide the type of environment which allows freedom to face situations which are vital; freedom to purpose, to plan, to choose, to execute, and to evaluate, and which gives opportunity for the exchange of ideas, the accepting and fulfilling of responsibility, and the sharing of experiences and materials through work and play activities;" and which provide knowledge of the "value of honest work, the avoidance of waste, the values, limitations and possibilities of materials, the value of money and of systems and organizations men use in living together."

Several aspects of the culture and traditions of Utah are outlined, and strains and conflicts impinging upon these traditions today are examined. Questions for exploration by teachers are proposed with a view to locating the implications for education of existing and developing social and economic conditions. Examples: "Would studies that recognize where the community dollars come from help establish ideas of true economic values? . . . Competitive pressures have replaced the earlier spirit of cooperation . . . leading in an increased degree to the belief that to *get ahead* is an ideal to be valued, regardless of what the results may be to other human beings. . . . What opportunities are there in the classroom to eliminate excessive competition?" The bulletin presents suggestions of "ways and means of approaching the vital problems of our day and seeing their relationships to the lives of children of the elementary school."

A section is devoted to psychological foundations of curriculum construction. Ideas such as the following are given prominence. "The concept of the learner as a mechanical robot responding . . . to external stimulation is being modified to give greater recognition to the role of internal drives, urges and purposes. . . . Learning results from the buffering of these internal factors upon the environment. . . . Readiness, a vital factor in any learning situation, is conditioned by maturation of those traits involved in the learning process. . . . Children differ vastly in their capacity to learn, with respect to rate . . . and levels of attainment. That which is best adapted to one cannot be equally appropriate to all."

If the ultimate goal of education is the "development of critically thinking individuals in a society, . . . how can this . . .

person best be developed? . . . John Dewey has said we learn through activity; we learn through experience; education is the continuous reconstruction of experience." Utah teachers give accounts of their experiences with children "learning through activity as against learning through mere telling," and conclude that the activity program can be an effective one. "This experience curriculum should begin with simple, direct, first-hand experiences closely connected with feeling, tasting, smelling, seeing, hearing, manipulating materials, . . . and gradually be extended with the growth of the child to include, beside first-hand experience, more use of symbols and abstract ideas, but always with emphasis on real living in a social situation where he may work, initiate, create, contribute, enjoy, play, sense, respond, think, challenge, be challenged, decide, share, cooperate, practice, feel, care, and renew. . . . Increased heterogeneity of interests, needs, and capacities represented in the present school population has necessitated a wider variety of activities, a diversity of methods and of standards of attainment suited to the varied individual needs."

Utah favors a curriculum which uses "centers of interest" with "experience functioning in the learner," opposes one in which "uniformity of direction and standardization of attainment are set forth. . . . We commend an administrative and supervisory setup in which teachers are encouraged to try new procedures."

The bulletin says "the effective curriculum provides for a comprehensive and well balanced interpretation" of aspects of human experience. The aspects chosen are: "Personal Well Being. . . . Communicative Aspects. . . . Understanding Aspects. . . . Quantitative Aspects. . . . Social Implications and Interpretations . . . and Aesthetic and Manipulative Aspects." A section is devoted to examining each of these aspects, and opens with a statement of point of view, and furnishes descriptions of actual conditions met and dealt with by classroom teachers. Every account is followed by evaluative comments, sometimes by the teacher herself, sometimes by pupils, sometimes by those responsible for the writing of this Guide. The narrative passages are reminiscent of articles in **Indian Education** which have described approved teaching procedures for Indian schools. Those interested in knowing in detail what Utah teachers have done to help education serve practical purposes will do well to read and study this material.

In discussing each aspect of experience, space is given to suggestions for integrating that particular aspect with the others Examples are evaluated in terms of the objectives which the experience or the activity is designed to assist in reaching. "Science, is a way of thinking, is not confined to any one subject field but becomes vitally concerned with developing power to discriminate truth from error in any endeavor."

The Utah point of view about the communicative arts is next stated. "When reading and listening help children understand their world, when speaking and writing help them release their creative powers through self expression, then are these tools contributing to the social effectiveness of group living and the personal adjustment of the individual. . . . Whereas formerly the skills . . . were considered as separate subject areas . . ., the present trend is to consider the field as a unity. . . . It is recognized, however, that there are skills that need to be singled out from time to time for special emphasis." A number of examples of children's creative writing are included. Since writing and spelling "are merely tools, they must not be acquired as though they were ends in themselves. . . . Penmanship is considered as a . . . tool to be mastered . . . when the need arises in life situations. . . . There is no hard and fast rule for group standards, rather standards should be individual in nature. . . . The present trend favors the use of manuscript writing in the beginning grades. . . . Reading readiness must be developed before the actual acquisition of reading symbols. . . . Standards cannot be uniform for all pupils of a given grade. . . . The child should not be forced to reach certain arbitrary standards but is encouraged to and guided to reach the highest level of attainment of which he is capable."

The effectiveness of science, which represents the "understanding aspect," is determined to some extent by the ability to use language, reading, spelling, writing and numbers as tools of thinking and in the communication of ideas. "The teacher of science need not be an encyclopedia of information. She must be willing to explore and learn with the children. The major aim will not be to develop scientists, but educated laymen who can *think and do* more intelligently. . . . Over the period of years the knowledge of the subject matter and science experiences should . . . lead to the making of generalities that are concerned with the major themes of science education. . . . The emphasis is shifting from the mere learning of facts to the use of factual material in the interpretation of life and adjustment to it." Here are titles of a few teacher's accounts of science experiences: "*The Water Cycle, Hatching Chicks, Making and Caring for an Aquarium, Hibernation, Conservation of Land and Water, Making a Science Collection, A Study of the Sky, The Weather, Our Flower Box, Experiences With a Water Bug, Birds, A Spider Comes to School, A Display of Woods and Their Uses, Making a Collection of Minerals, Building a Terrarium.*

Arithmetic is discussed as one of the "quatitative aspect. . . . Application of the experience curriculum philosophy will probably necessitate some significant changes . . . . There is room for considerable advance beyond the usual classroom practice . . ., chiefly by insistance that activities in arithmetic be made more significant. . . . Purposes which deal with the relationship of arithmetic to social functions are receiving greater recognition. . . . The weaknesses resulting from the exclusive use of textbooks may be overcome by richly supplementing . . . with the child's direct and concrete experiences. . . . The function of drill is best conceived as that of fixing something which has previously been comprehended; it cannot take the place of instruction which is necessary for comprehension. Much drill has been so improperly administered as to be ineffectual . . . and, when used at too early levels, positively harmful. . . . Experiments . . . indicate . . . the need for taking into serious account the mental level and the arithmetical foundations of each child. . . . Not to do so is to doom many children to failure, to do so adequately is to insure reasonable success to the large majority. . . . It is no longer necessary for all pupils of a grade to work at the same tasks at the same time. As far as practicable each learner should be stimulated and guided to progress at his own optional rate. The curriculum should not provide for a set body of materials for each grade level."

In discussing grade placement of arithmetic materials, Utah follows Breuchner's idea of "developmental levels" as set forth in the **Thirty-eighth Yearbook of the National Society for the Study of Education.** Stage I comprises roughly the pre-school and usually part of grade 1. Stage II comprises grades 1 and 2. Stage III comprises grades 3 and 4, Stage IV grades 5 and 6. Breuchner warns that even these developmental levels "cannot be sharply differentiated, . . . While approximate grade limitations are given for each stage, these designations should serve merely as guides to teachers since pupils will not reach the various stages at the same time.

The teaching of arithmetic has in the past been based on learning each of the separate number combinations; the specific meaning of each symbol. Such skills are often acquired without understanding. The ability to handle a symbol is no assurance of the presence of the concept. . . . Perhaps the broader and less accurate concepts of quantity, as expressed in words such a *large, few, far,* and *part* are adequate to the earlier quantitative experiences. The value of manipulation of symbols in advance of their meaningfulness may be seriously questioned. The need of accuracy in expressing quantities may well parallel the need for accuracy in the experiences encountered.

"A few students will give evidence of unusual ability and interest in mathematics. These should be discovered and . . . provided with opportunities for more rapid advancement. . . . The greater number of students will be required only to reach that level of achievement involved in the practical application of mathematics to everyday life.

"There is no fixed sequential order for the growth of concepts aside from the child's needs and his experiences."

The social studies point of view, representing "social implications and interpretations," is expressed as follows: Since democracy provides a distinctive way of life, it requires a distinctive kind of education. . . . It must be acquired through an educative process. . . . Because education is a social process, all school experiences are basically social. . . . The social studies area . . . has a definite contribution . . . to the understanding of democratic values. . . . Its purpose is help children know, understand and appreciate the people of the world . . . . Children learn and understand the dependence of people upon earth forces for sustenance; that man's work is determined by earth forces. . . . The democratic way . . . is learned by practice in democratic ways of working with people day by day.

"Rather than grade by grade placement of subject matter, selection of problems from rather large areas is made on the basis of what a child needs to equip him to live successfully in a democratic society and on the basis of his interests. . . . A different use of text books is indicated. . . . Numbers of books in individual copies . . . make . . . greater opportunity for reaching valid conclusions on a problem when many points of view are studied instead of a single viewpoint becoming the common viewpoint of the group."

Although "sequence is best determined by child interests and needs," possible areas for the social studies are mentioned. For the lower elementary level: "*Family Life Community Helpers, The School Community and Helpers, Sources Supplying our Basic Needs,*" for the upper elementary level: "*Our Own Community, Nearby Communities and Our State, the Nation, Other Communities, Our Cultural Heritage, Our Neighbors to the South.*" Examples of pupils' evaluation of their experiences are quoted. One class group stated, "We have spent too much time reading and discussing older civilizations . . . and we can do nothing about them. We don't know enough about our own country. . . . More time ought to be spent understanding our own problems and finding out what they are and how we can cooperate in solving them."

Art is discussed under "aesthetic and manipulative aspects" of experience. After emphasizing the value of art as vitalizing and enriching all living and as a natural and satisfying child activity, the bulletin says, "at times the doing is more important than the finished form. A child's work should be child-like. An adult standard is neither to be expected nor desired. . . . Hectographed and mimeographed patterns designed to be filled in with color are vigorously condemned. . . . Copying as a routine practice and drawing of duplicate patterns by every child . . . to be used in meaningless repetitive fashion are to be discouraged."

The use of cumulative records is advocated; "Cumulative record for each child, cumulative record kept by children, and cumulative records of group activities as they develop over various periods of time." Examples of anecdotal records of behavior incidents from Utah schools are presented.

The guide states that "the educational philosophy of our state joins in the . . . thought that the future curriculum of our schools must no longer be superimposed. It must come from the cooperative efforts of the school, the home, the church, and the community." Indian Service local study groups and curriculum planning conferences have frequently invited the participation in their deliberations of school students, parents, and representatives of various community social and religious agencies.

WASHINGTON

Temporary Guides for the Elementary School Curriculum, for the **Junior High School Curriculum,** and for the **Senior High School Curriculum for the State of Washington** were issued in 1944. These guides are the cooperative work of public school teachers, administrators and instructors from institutions of higher learning. The Foreword states that the material in the guides, in the hands of teachers, "should undergo changes to suit the individual pupils, school and community," and that the state curriculum program "encourages the development of local courses of study."

This new course puts emphasis—as does education in Indian Schools—on group living, creative activities, home-school relationships, and the growth and development of children, and states that these matters are "so significant that many more pages might be devoted to them."

The introductory section, titled *Learning Experiences of Children*, makes a number of general statements with which Indian school policy would be in agreement. For a school to serve children effectively, "its curriculum will be organized into units of real experience. . . . To study geography for 20 minutes and then to turn to a 20 minute period of history does not promote understanding of those important contributions in their natural setting. What one learns has meaning when learning has occurred as a unified experience. . . . A school cooperates with and makes full use of every educative agency within the community—museum, library, music, radio, theater, industry, public services and business." The children should be developing "the only sort of control or discipline which functions effectively in life—self control. . . . Any curriculum . . . should be flexible to accomplish its ends." When the daily schedule is considered to be a "means to maximum child learning, it will need to be flexible. . . . Large blocks of time devoted to related subjects are preferable to many short periods. Drill exercises, however well motivated, will fail to develop the desired skills unless they are adapted to the needs of the individual. We cannot depend . . . upon text books alone to furnish these drill exercises," nor to "set the situations which give meaning and purpose to them. The teacher must supplement, . . . for some children he must prepare, nearly all of the drill exercises. . . . Teacher-made practice materials are undoubtedly superior to many commercial materials." Before the teacher puts commercially prepared material before any child, "he must determine what portion of it to use, which portions to eliminate, when to use it. If a portion serves no present purpose, he should not hesitate to omit it."

The guide for Washington elementary schools, after surveying the ways in which the 25 to 40 or more children in a class differ, and after stressing the necessity for a course of study to provide for these differences, proceeds to list characteristics common to children at various growth periods. These common characteristics, like individual differences among pupils, have implications for the curriculum maker.

The elementary guide lists a number of central themes around each of which the work of a class group is to be centered, and also gives titles for suggested units of work related to each theme. Methods for correlating language, reading, art, music, health and safety with the central theme are proposed. Possible pupil activities and visual aids are listed.

Teachers of intermediate grades are advised to fuse geography and the history of how man lives and progresses rather than to study history and geography as separate entities. "Children need not go outside the State of Washington to find examples of all the means by which men have changed their environment to meet their needs." With the home as a starting point, children can then be led to study similar environmental controls far from home.

Practical arts activities are to be as closely integrated with the social studies, fine arts, reading and language as possible. In the elementary grades they "may be organized around the field of industrial products which are most significant in life . . . food, clothing, shelter, utensils, records, tools and machinery. They deal with the materials of nature which are made over by man.

"Science content should be thought of as a means to an end rather than as an end in itself.——Units of work may not always be stated in subject matter terms but in the form of major science generalizations, principles and concepts" to make for an an understanding of the inter-relationships between them and the influence which they have upon life and society. In a democratic society the child must "learn to distinguish facts from propaganda and to arrive at conclusions on the basis of information obtained from reliable sources.

"How many pupils best learn to speak, to write, to read and to listen? . . . Boys and girls learn when they are interested, when they have something real to say and when they recognize a need for saying it. "To help children in these matters, it is suggested that the classroom be organized "as a community where children plan, share, cooperate and work together in undertakings that are meaningful to them. Language development cannot take place effectively in a school program in which the chief emphasis is on following the directions of the teacher or on reading and reciting from the text book."

In discussing the teaching of arithmetic in the elementary school, the guide makes these statements. "The first two years should be mainly a readiness program . . . for the purpose of giving the children those experiences which will help them realize that arithmetic is closely related to social living. . . . Not all children will acquire readiness for arithmetic processes at the same time. The arithmetic lessons of the child's day are the various activities of his day," and the teacher is urged to supply as many situations as possible for the use of number, bearing in mind variations in the maturity of different children.

Here are a few general statements from the **Temporary Guide for the Junior High School Curriculum.** "The adaptation (of learning materials) to the extent of experience and to the degree of ability possessed by the pupils . . . is the primary obligation which rests upon the school. The transition from the elementary school to junior high school can best be made if one teacher is assigned to each grade . . . for a minimum of half a day for instruction in English, mathematics, social studies and general science. If departmentalization is necessary, art, music, physical education and health, agriculture, home economics and industrial arts should be taught by special subject teachers." It is recommended that "home study be kept at an absolute minimum."

A large portion of the junior high school guide, as well as that for senior high school, is devoted to agriculture. In the junior high school, agricultural experiences are "an orientation to give a knowledge of the magnitude, importance and diversity of American agriculture," and should begin by showing the pupil "how the agricultural enterprises of his local community fit into the entire agricultural picture." The guide suggests that "pupils experience appropriate functional relationships with farming through a . . . program of farm practice, "and that school enterprises be set up appropriate to conditions in different parts of the state—Yakima Valley, eastern Washington and western Washington. It concludes that farm-shop work is of vital importance and insists that school agricultural experiences must "vary according to the needs of pupils and the community."

For home economics, the junior high school guide proposes that students spend more time on "activities and development of skills than on abstract discussion and book work."

The section of the guide which discusses language arts states that, "If the teacher will . . . study his pupils, finding out the types of homes from which they come, their special aptitudes, their hobbies and leisure time activities and their particular likes and dislikes, he will have a basis for a real English program. Topics for written composition and for speech activities will be easy to suggest; the types of book which the individual pupil will read with interest can be found without difficulty.

"Pupils in the junior high school should study mathematics in accord with their ability. . . . Courses in mathematics should include practical applications from . . . life situations . . . in immediate social problems such as taxation, home buying and vital statistics."

The function of practical arts is "to provide experiences which will fit the individual to be more useful as a producer, more appreciative and happier as a consumer, and more valuable as a citizen . . ., to provide opportunities to construct, to investigate, to experiment, to create and to learn through those activities in which the pupil can engage with success."

Recommendations for junior high school social studies are practically the same as for the elementary school but the scope of the proposed content is broadened.

The **Temporary Guide for the Senior High School Curriculum** states that the material now included will be supplemented by the work of "regional committees which will assist in interpreting its use . . . in the individual school system," and which will put their suggestions into the form which will "stimulate the maximum amount of desirable growth in the young people of that school."

This guide stresses agriculture and says that "agriculture practices in the State of Washington vary in different localities, . . . soil types and land values materially influence the types of farming in a given locality." Hence the agriculture instructor must develop his teaching so that "it will apply to the community in which he lives and works, . . . he must be ever mindful of the local aspects and their relationship with national and international problems." Since no one course in vocational agriculture can be written to fit the needs of schools everywhere, it is imperative that the course suggested in the guide be "revamped to fit the farm enterprises commonly found in a specific school community." The instructor should strive to "keep a step ahead of the best farmers in the community." The guide emphasizes the fact that "the farmer of today must be a business man, . . . have good judgment in buying, selling, marketing. He must keep accurate farm accounts, write business letters and talk at various meetings of farm organizations."

The instructor of agriculture should "make applications from the field of mathematics, English or science to problems that arise in the study of agriculture, . . . other high school teachers may find it invaluable to use the experiences and understandings of farm youth as a basis for relating their subject matter content" to the needs of rural youth.

In planning a business education curriculum for senior high school to meet community and individual needs, "the first essential step is to discover those needs by means of a survey. Data would include . . . average number of individuals employed in different jobs within the business fields of the community, figures on present labor turnover, kinds of office and store jobs available, kinds of office machines, information as to personal qualifications of workers for different jobs." The data would be used for setting up a vocational guidance program and for developing vocational education experiences for the older high school students.

Senior high school home economics is a broadening and an extension of experiences proposed for junior high school pupils. The guide suggests that home economics should be correlated with agriculture through gardening, purchasing and food preservation; with practical arts through constructing and designing furniture; with business education for home makers; with art through the study of art principles as applied to clothing and home furnishings; with social science and history through study of social changes which affect the family, the home and the community; with science through study of the digestion and assimilation of food, the chemistry of foods and textiles, of electricity, lighting, radio and the mechanics of the home; with physical education through matters of posture, first aid and use of leisure time; with English through the reading of fiction about good home relationships; with music through entertainment; with dramatics through seeing and reading plays which show good family patterns and relationships.

Language arts, science and practical arts for senior high school are to be an intensification on a higher level, of the experiences provided in the junior high school.

The guide suggests that there is wide opportunity and real need for "reorganizing the content of mathematics," for "improving methods and extending correlations with allied subject fields." It states that postwar mathematics courses should probably include consumer or social mathematics for those pupils who take little or no mathematics beyond 8th and 9th grades. It is suggested that teachers "stress applications that will give pupils confidence in using mathematics techniques in such fields as industry, . . . foster estimating answers and judging the reasonableness of solutions. . . ."

In meeting the need for greater skill on the part of the pupil in applying mathematics, there should be "numerous opportunities for teachers within each school to work together to interrelate current work in . . . industrial arts, science, agriculture, and social studies with the work which pupils are doing in mathematics."

For the social studies in the senior high school, the guide suggests that "Recognition of the fact that all our institutions have been the product of changing conditions in the past will help to prepare young people for inevitable postwar changes at home and abroad, and for the necessity of planning intelligently to meet them." Rational thinking in and planning for the future calls for emphasis on world geography as a basis for world events, location of vital resources, the effect on world relations of improved methods of transportation and communication; for understanding of problems of Latin America and the Far East; for study of domestic adjustments such as manpower, production, and financing of war and peace; for looking into the place of youth in the postwar world; for understanding the need for renewed emphasis on the meaning of democracy and the values inherent in it as a way of life. "A clear understanding of basic issues will go far to create sound morale in young men and women of high school age."

Probably the two most striking tenets of the new State of Washington course of study are its constant insistence on bringing out the interrelationships of the different elements in the student's learning experiences and its repeated injunction that each school must assume responsibility for revamping the suggestions of the guides to fit the local community and its own students as individuals. A survey of the offerings at Indian Service summer schools and a reading of **Education for Action** will reveal many beliefs and approved practices parallel to those discussed in this article.

Part III

REVIEW OF COURSE OF STUDY FOR TERRITORIAL SCHOOLS OF ALASKA

1. ALASKA ELEMENTARY SCHOOLS

The **Course of Study, Elementary Schools of Alaska** was issued in 1941 by the Territorial Department of Education, Juneau, Alaska. For a piece of educational material published eight years ago, this course of study is a decidedly forward-looking document. Such phrases as *schools of today, the modern school, in recent years,* and references to progressive educators from John Dewey's time to our own are found throughout the text. The volume gives more than lip service to recent findings of educational psychologists.

This course of study is "a cooperative product . . . developed by those who are in close contact with children in classroom situations. It is presented . . . in broad outline form with an idea of stimulating, not thwarting, the initiative of teachers. Classroom teachers are urged to utilize the leeway given to develop a program adjusted to the need of the pupils and to the local community."

The *seven cardinal principles* formulated in 1918 by the Commission on Reorganization of Secondary Schools, are accepted as a statement of objectives for territorial schools, both elementary and secondary. Two other objectives have been added: *Leadership-Followship, and World Mindedness.* Other objectives, put forward in 1931 by a committee of New York state superintendents, principals and teachers, are also adopted by Alaska public schools because "they supplement, interpret and reinforce" the other objectives.

The introduction states that teachers are expected to "modify and revise materials to meet local needs" and to "incorporate better practices as they are discovered. . . . The work of a successful teacher must be dominated by the ideas of growth and development."

Small schools

There are many one-and two-teacher territorial schools in remote communities. Teachers in such schools are asked to take "the week" as the unit of time in planning educational experiences. This arrangement affords more flexibility in schedule-making than the use of "the day" as a unit of time. Combination, correlation, and alternation will partially overcome problems arising when a one-room school teacher has "to teach eight different grades, each grade constituting an average of eight classes per day."

Combination of two or more grades is suggested in work such as penmanship, physical education, health education, music and art.

Correlation is defined as the combination of related subjects. "Nature study, science, literature, and history stories may be taught in connection with language in the first two grades. History may be taught with reading in grades four and five. The various subjects of the language group—reading, spelling, writing, language . . . are the most easily correlated.

"Alternation combines two or more grades and means that, at intervals, pupils have to skip a grade and come back to it a year later." Alternation is considered of doubtful value for grades one and two, "except in . . . health, nature study and story telling. . . . Pupils in grades three and four may be grouped for work in all subjects except reading and arithmetic."

Teacher and community

The importance of the relationship between the community and the teacher is pointed out. "It is important that the teacher respect the mores of the school community. She may consider them too narrow or too liberal, but her position demands that she shall not . . . criticize them publicly.

"The school life of the pupil should be closely connected with the life outside the school, and the community activities should be integrated with those of the school.

"Home study is not recommended for any of the elementary grades."

Here follow comments about various elementary school subjects.

Arithmetic

The course of study accepts Franklin Bobbitt's findings to the effect that: "(1) Pupils should be taught that kind of arithmetic which will be of use in the practical affairs of life, and (2) . . . which will enable them to read and understand the material in newspapers, books and magazines. . . . Arithmetic is a tool subject. It is a means to an end, never an end in itself . . . not . . . a mastery of facts and skills . . . independent of life situations."

Art

"Through art . . . the child can develop a more alert, critical, evaluating eye; a stronger creative imagination, motor coordination, and . . . an intensified emotional life.

"The social objectives of education are causing a reorganization of the teaching procedures in all subjects of the school. Subjects which make contacts with real life situations are being stressed. . . . Art instruction is being expanded to touch numerous phases of life: Industry, business, dress, home, theater, city, and the art of living. . . . The teacher should endeavor to connect art . . . with all the other work of the school." Art should help each individual "to derive more pleasure from ordinary things."

Character Education

The indirect method of character education is recommended. "It takes place in regular classes, in the opening exercises, on the playground, in the assembly hall, the library, the laboratories, and on the way to and from school." Character is "no vague, abstract ideal of goodness . . . character consists in making proper responses to the situations which life presents," and is "a composite of many specific habits. . . . Character education consists in training children to make responses that are socially acceptable."

Literature, history, geography, science, arithmetic, music and art, and extra-curricular activities are listed as areas where character education may be integrated with school life.

Citizenship and civics

Teachers are reminded that John Dewey pointed out that the development of civic efficiency is one of the major aims of education. This course of study holds that pupils in territorial schools, through membership in various groups "will form those habits and dispositions necessary to life in a democracy. The school life, recognizing no social classes and permitting no special privileges, should approximate as closely as possible the ideal of a democratic society." It suggests that citizenship training may be "correlated with history and geography into a social science unit." Opportunity for "the training of . . . attitudes may be found in the teaching of regular lessons, in supervised play, in general conversation, in hand work, and in free play." Another method of developing good citizenship habits is through group social controls applied by pupils themselves.

Geography

"We have substituted for the old-fashioned memorization and map study, a kind of geography which suggests important problems to children . . . many of the social and economic problems with which educated people must deal.

"Alaska boys and girls are especially fortunate in the variety of their surroundings. . . . There is no better text book available than the mountains, rivers, glaciers, valleys, volcanoes, and lakes. . . . The midnight sun, aurora borealis, a salmon run, a gold dredge, or a mink farm may become, in the hands of an ingenious teacher topics of delight and growth." Geography should be taught so as to explain "the relationship between man's physical environment and his activities: (1) Procuring raw materials as in mining, fishing, hunting, lumbering, and agriculture; (2) manufacturing these raw materials into usable products such as foods, clothing, shelter, utensils, and machines; and (3) distributing these raw and finished products—the problems of transportation and commerce."

Handwriting

"It is unwise use of school time to develop skill in writing to a point far above what the individual will use in ordinary life. The objective in handwriting is not to write like an expert but to write well enough and rapidly enough for the demands of average life."

Health

"Education is not a mere matter of gaining knowledge; it is a matter of life and growth. . . . The question of health conditions everything that the school does. Statistics . . . show that from 30 to 50 per cent of absences are due to illness . . . that a large per cent of cases of retardation, elimination, and school failure are due to ill-health and physical defects. . . . The health program in the modern school includes at least three phases: (1) Health service, (2) health instruction, and (3) physical education." One of the general objectives is that of developing the formation and practice of healthful living, and another that of understanding and practicing the use of preventive measures.

History

"From one point of view all school subjects may be considered as phases of history. . . ." The question of which of the numerous aspects of history—political, military, industrial, property, classes of society, education, customs, amusements—are of most value to elementary school children, "must be determined on the broad basis of the aims of education. A point to be considered is whether a given topic helps to explain anything in the life of our own time; . . . to show where some condition or problem of today comes from and why we have it in the form we do.

"In recent years there has been a tendency to broaden the scope of the historical studies . . . less emphasis is now given to changes in government and to warfare. . . and to place greater emphasis upon the development of commerce, agriculture, education, literature, art and science. . . . Methods of teaching have been revolutionized in recent years by educational psychology. The mere knowledge of facts and dates, . . . the isolation of history from related subjects and actual life experiences has gradually disappeared."

"No subject in the elementary curriculum relates so naturally to all other subjects as does the practical arts. . . . The subjects that bear the closest relationship to manual arts are drawing, science, history, geography and arithmetic. Art, geography, history, and arithmetic are related to household arts.

"In order to gain the fullest value from practical arts, pupils must have many and varied experiences. The handling of the raw materials and some participation in the processes, will help give a clearer understanding of what is involved in the changing of raw materials to finished products. . . . Excursions to industrial plants help pupils gain an appreciation of the . . . importance of industry in modern life.

" . . . Pupils may . . . work on home and personal problems in their free time or as part of their work for other courses. Many of the activities suggested in the outline may be carried on in class time. . . ."

Materials significant in today's living are listed as: (1) food, (2) textiles, (3) woods, (4) paper, (5) metals, (6) clay and allied products. Upon these the school work in practical arts is based. The list of tools and implements recommended for use and many of the activities proposed are the same which are found in various publications dealing with education in federal schools. A number of curricula of local Indian schools have made quite detailed plans for relating practical arts activities to specific subject matter learnings, and teachers in territorial schools are encouraged to work out such inter-relationships.

The territorial course of study abounds in injunctions such as, "The wide-awake teacher will test out various schemes. . . . The teacher should endeavor to connect . . . as closely as possible with all the other work of the school, . . . she should use her own judgment. . . ."

Territorial teachers are advised to seek the help of specialists, just as are teachers in federal schools. As an example, "For suggestions and information, write the Extension Division, University of Alaska, College, Alaska." This is in connection with the local planning of work in household arts.

Language

"Language is a social subject. . . . Language has to do with the speaking of words and with the execution of language signs. . . . Although due attention should be given to both oral and written composition, oral expression is by far the more important. This judgment is supported by the many scientific studies made in recent years. With the average adult, uses for written composition are limited. . . .

"In recent years educational psychologists have come to believe that . . . the elementary course of study should include only those portions of grammar which have a direct bearing on the correction of language errors. Hoyt and Briggs have added scientific proof to the belief that repeating conjugations, giving rules, and analyzing sentences are of little value. . . ."

Elsewhere, and at many points, this course of study cites scientifically-controlled educational experiments as justification for the advice given to teachers. This procedure duplicates that of administrative and supervisory personnel of the Indian Service, and one of its summer schools for in-service training offered a course, Scientifically-Controlled Educational Experiments.

Music

The value of music in the school is summed up in these four points: "(1) Exerts a definite beneficial effect upon the physical, mental, and spiritual life of the individual; (2) an excellent type of intellectual training; (3) a high value as a socializing force; (4) one of the most important agencies for bringing about a worthy use of leisure."

Physical education

The program emphasizes the "all-around physical, social and mental development of the normal child, not the training of star athletes, expert performers. . . . The class room teacher will be required to handle the program in a majority of schools."

Reading

"Reading . . . is the most important and the most troublesome subject in the elementary curriculum . . . since it is a tool, the mastery of which is essential to the learning of nearly every other school subject," and "since pupils fail in reading far more frequently than in any other elementary skill." This is quoted from **The Importance of Reading** by Arthur I. Gates.

"Intelligent silent reading is of far greater importance than formerly. A clear understanding of what is read, as well as attitudes, habits, and skills is emphasized. This new emphasis is based on the knowledge of the reading that children and adults do in ordinary, everyday life." In this connection it is interesting to note an Indian Service Summer School course titled, *The Three R's Correlated With Activities of Real Life.*

Importance is placed on the period of preparation for learning to read, which is defined as, "The pre-school age, the kindergarten, and frequently the early part of the first grade. Its chief purpose is to provide wide experiences which prepare for reading. . . . The teacher should not confuse the preparation period with the initial period which follows it. The purpose of the former is to get the children ready to be taught reading. . . . Some children . . . because of specific deficiencies and immaturity will remain in the preparation period for several months.

"Many schools in Alaska have the problem of teaching children from non-English-speaking homes. . . . Investigations indicate that children" from such homes "are less efficient on the average in reading than are children from English-speaking homes." Teachers who have a considerable number of non-English-speaking children in their classrooms are warned that they "will need to make special provisions that will insure specialized instruction." This is an example of a tendency of the territorial course of study to state a problem, and then give the teacher the responsibility for solving the problem. Federal schools face this same problem of the non-English-speaking child. **Indian Education** has carried articles giving teachers detailed help in solving the problem. **Minimum Essential Goals for Indian Schools, Beginning Year, Non-English-Speaking Children,** has been developed and sent to the field. Indian Service Summer Schools offer such courses as, *Non-English-Speaking Beginners, Their Program;* and *Over-Age and Retarded Children, Their Program.*

Persons who like to believe that there is certain magic in the public school system, **per se,** should note the several occasions on which the territorial course of study admits that there are unsolved problems, inadequacies, deviations from the usual—even failures.

Science

"It is hoped that this course of study will encourage teachers to give to science the prominent place it deserves. . . . The success of instruction in science does not depend upon the teacher's ability as a naturalist or as a scientist. . . ."

A list of suggested activities contains many which are identical with those recommended to teachers in federal schools. The Alaska list includes: Going on field trips, making collections of science materials which children bring to school, the showing of pictures and slides, making a classroom museum, organizing science clubs, setting up an exhibit of harmful plants and animals, planting seeds, growing of plants of various kinds, making and caring for an aquarium and a terrarium, constructing an insect cage, using thermometers, a magnetic compass and magnets.

". . . Science is at its best if the objects of interest can be studied in their natural setting. . . . The fields, the streams, the mountains, the sky, the weather, and the forests are the best text books.

"Examinations, reviews, and drill should not occupy a prominent place in science instruction.

"Any subject can be motivated by connecting the instruction with the pupils' experiences. . . . The materials for English, reading, arithmetic, geography, history, and civics should often grow directly out of the problems of science." A number of examples of such inter-relationships are given, among which are these: Arithmetic problems about the distance birds travel in their annual migrations, the amount of lumber in a tree, geographical influences on animals and plant life; the history of the introduction of plants and animals into the area, of industrial development, civics in matters such as game laws, control of mosquitoes and other insect pests, practical arts in building bird houses, seed boxes, radios; repairing faucets, electric irons, doorbells.

Chart supplement

In the spring of 1947 the Territorial Department of Education issued **The Chart Supplement to the Course of Study** for elementary schools. It is concerned with weekly allotments of time devoted to elementary subjects, with titles of approved texts for use until 1949, and with the knowledges and skills to be "known or mastered by each child." . . . A cursory study of this chart reveals few fundamental shifts in the suggested scope and sequence of subject matter materials, but quite a number of new approved texts are listed. The chart was prepared with the aid of the grade teachers in the Gastineau Channel area, and it presents in condensed form an overview of the step-up of subject matter from grade to grade.

Teacher guidance

A letter of instructions which accompanies the chart makes these suggestions:

Each teacher "knows his strengths and weaknesses, and . . . his natural enthusiasms," and can "follow the course of study," and at the same time make "use of his strong points. . . ."

Each teacher knows which approach to teaching makes his work most successful. "All teachers . . . could use the project method in shop, art or sewing, where the method is inherent in the materials, but only certain kinds of people can use it in history or English, where other methods . . . are equally . . . effective."

Educational policy of the Alaska Native Service in regard to federal schools in Alaska would agree that all good teaching methods have their place in a school system, and that one may be especially suitable at some given point in the teaching-learning process, but it is believed that all teachers can better their performance by learning to use procedures over and above those they now employ.

"The teaching of each child, no matter how large the group, is . . . an individual problem, and the group lessons must be based upon the reality of the achievement of its different members. Children who are markedly below the group level must have remedial work and those above . . . an enriched program. . . . Full understanding must accompany the learning process if it is to be efficient in terms of usefulness in daily life or . . . to be retained for future use.

"Available facilities in the community and . . . school . . . influence the organization of the school program and . . . the variety of methods which may be used. . . . A school in a fishing village where marine life is plentiful will have an entirely different science program from a school in a mining area.

"Recreational and occupational interests" of the community, and "the specific cultural traits of adults" living there, should "contribute their share of variation to the organization of the school program." Teachers who follow the method of proceeding "from the known to the unknown . . . will find the community a fertile ground for new ideas on which to base and with which to motivate the school work."

These same several points are stressed in all local curriculum construction work in federal schools.

Teacher-pupil relationship and child development are discussed. "A pupil who is unduly punished for not knowing what the teacher thinks he should, may learn only that the teacher is a mean old thing and the school an unpleasant place. A pupil who can parrot-like repeat the lesson, may be totally lost in applying it. A pupil who is good at art, music, or book reports may be wholly unadjusted in social . . . situations. A pupil who is dominated by an overpowering teacher, or forced to study material well beyond his level because *it's good for him*, may be ruined for life."

The course of study for public elementary schools in Alaska is acutely conscious of the limitations imposed by the entire situation in the territory: Many small, isolated schools; lack of opportunity for administrators and teachers to meet and discuss problems; frequent changes in the teaching staff; the need for varying programs in different schools and the complications which therefore arise in adjusting transfer of students; certain limitations created by territorial law and lack of funds for adequate supervision. Those responsible for federal schools face those same problems; they are however so convinced of the rightness of the thinking common to territorial and federal educational philosophy that they are continuously active in locating ways and means by which teachers can turn theory into practice in the daily routines of school life.

There must be some federal school administrators who, upon surveying public school recommendations, realize that certain of their teachers are falling short of what territorial schools are asking their teachers to do. Likewise some teachers in the Alaska public school system are accomplishing less than federal school teachers are expected to accomplish. Apparent differences in performance are not so much due to any dissimilarities in administrative and supervisory points of view as they are to variations in the ingenuity and creative imagination of individual teachers and principals. The need for on-the-job training is paramount.

2. ALASKA SECONDARY SCHOOLS

The term, *high school* in Alaska means grades nine through twelve.

The secondary course of study began to appear in 1943 and is contained in a series of separate bulletins. At that time Alaska had four high schools employing as many as twelve teachers, four employing only one teacher, and the remaining twelve ranging between two and seven teachers.

Bulletin No. 1, **Administrative Manual for Alaska High Schools,** 1943, explains that teachers in territorial high schools came "from almost every state in the Union," and regrets that there is no way in which they and administrators can get together to talk over educational matters.

Differences between schools

"None of the Alaska high schools are in a position to offer a wide variety of courses," and "it is no criticism of the small school to recognize . . . definite limitations in the . . . subjects that may be offered. To spread the efforts of one, two or three teachers over a wide range of subjects is almost certain to result in inferior instruction. . . . The subjects . . . included" should be selected "because of their . . . contributions to the . . . objectives of secondary education for the largest number of pupils in a given school.

"The program allows sufficient flexibility to meet local differences, yet provides for efficiency and economy in operation. . . . Home economics, stenography, industrial arts, advanced sciences, foreign language, and the advanced mathematics" are not required for high school graduation since they "require more time and . . . equipment" than the smaller schools "can reasonably provide."

For the smaller high schools, various combinations of grades are proposed—as ninth and tenth, and eleventh and twelfth—with alteration of odd and even year subjects for each combined group.

Correspondence courses

The Territorial Department of Education will secure correspondence courses in high school subjects from the University of Nebraska for pupils living in sparsely settled areas where a territorial high school cannot be maintained. This is an instance of a public school system having developed a technique to meet a special problem, just as federal schools sometimes have to depart from usual school practices to satisfy the needs of certain groups.

Extra-curricular activities

Extra-curricular activities are recommended, provided that arrangements are made for the "universal participation" in them by pupils. Such activities "should be given school time. . . . It is desirable to have a student body organization," and "various clubs and organizations may then be formed as subsidiary units and derive their authority for existence . . . from the central student organization."

College entrance

The stated "requirements for high school graduation should not be confused with requirements for entrance to universities or colleges. . . . A high school diploma does not necessarily admit the holder to college."

Teaching methods

High school teachers are told that they "should be familiar with many modern techniques" of teaching children. "The alert and well-trained teacher will be able to select, modify and combine various methods in accordance with the . . . demands of the situation. Such intelligent and constant adaptation is highly essential to teaching success." This and similar statements appear in all of the subject matter bulletins for secondary education. Compare this advice with remarks made at a recent conference for teachers in federal schools, "A good teacher will make use of all the accepted teaching methods in one circumstance or another, and of combinations of two or more methods."

Teachers in territorial schools are encouraged to follow Pope's advice,
"Be not the first by whom the new is tried
Nor yet the last to lay the old aside."

Individual differences

"The teacher may vary the time spent in covering a given amount of work, or vary the breadth of work carried without changing the time allowed for completion," to meet pupil differences. "Abler pupils" may take an additional subject, thus "giving the weaker pupils a reduced schedule. . . . Another plan widely used . . . is that of ability or homogenious grouping." Teachers are encouraged to try such methods as, "variety in presentation, differentiated assignment, contract plan, and individual instruction."

"The conscientious and well-trained teacher will study the pupil from every angle. . . . **Above all the teacher must not jump to the conclusion that the pupil is mentally deficient before investigating the matter thoroughly."**

Guidance

Guidance is defined as "the process of acquainting the individual with the various ways in which he may discover and use his natural endowment, so that he may make a living and live to the best advantage of himself and society." Problems of young people include all phases of experience: "Educational, vocational, health, moral, social, civic, personal, and recreational.

"The guidance program recognizes the worth of each individual and seeks to help him achieve individual development and social efficiency;" it does not "make decisions for pupils," but aims to assist them "in making their own decisions."

Teaching personnel

"Territorial law requires that all high school teachers have at least a baccalaureate degree with training in subject matter and professional courses. . . . A fairly even distribution of men and women on a high school faculty is desirable. . . . All teachers should have interests outside the classroom and should be able to serve as sponsors of extra-curricular activities."

Public relations

"An intelligent and continuous plan for informing all the public about the schools is essential." Some of the means suggested for accomplishing this are: school newspapers and bulletins, community meetings, reports to parents, school exhibits, radio programs, plays and entertainments, athletic and other contests, visiting days, and the P. T. A.

English

Bulletin No. 2, **English for Alaska High Schools,** came out in 1944.

"Because of conditions peculiar to Alaska, the usual committee form of organization for curriculum construction could not be followed," and the bulletin was developed by an outstanding teacher in the English field with the cooperation of the Territorial Department of Education. This is true of the other bulletins about high school subjects.

"The materials, activities, and procedures suggested are not . . . requirements to be followed slavishly or blindly." This sentiment is expressed again and again throughout all the materials of this course of study.

"English should be correlated with other subjects through integration of the reading program and the subject matter of self-expression with other subjects and activities. . . . Practical morality and social success may be taught through the understanding of the problems and trials of literary characters, and social adjustment and wisdom through comparing fictional characters to real people and fictional problems to the pupil's own problems. . . .

"In Alaska, where direct experience is in many ways limited and in others overdeveloped," pupils need much vicarious experience through reading if they are to "get a clear picture of the contemporary world. . . . If the literature which is used to convey this personal experience fails to do so, it is not suitable for use, even if it is considered among the great classics.

"In the sense that language is a tool, the English course has no content, just as a shop or home economics laboratory has no content until pupils begin to make something. . . . English as a tool is used on several levels of skill by the average high school pupil." One of the aims of the English course is to give the pupils practice in the better use of the English tools in their appropriate situations.

"English has specific rules which are as exciting and as accurate as the muliplication tables. Good pedagogy demands that as little time as possible be spent on memorizing these rules, and that . . . mastery be expected of all. **Mastery . . . does not mean accurate recital of rules, but instantaneous application of them in ordinary use.** . . . There is . . . no content in these rules, meaning and value come with application."

Grammar is considered under the heading, *Mechanics of Language*. "This course of study recommends that grammar be taught in a setting of meaningful material and taught when the need for it arises," even if the teacher has to set up situations so that the need does arise.

Mathematics

Bulletin No. 3, **Mathematics for Alaska High Schools,** was issued in 1943.

Although the author of this bulletin refers to it as a "rather academic curriculum for secondary school mathematics," a glance at the stated objectives of general mathematics shows a sympathetic acquaintance with current studies in that field. The objectives to which reference is made are "(1) To reclothe and reinstate mathematics in its setting in such a way that fundamental concepts and processes may be made meaningful to the pupil; (2) To teach mathematical concepts underlying topics useful in social living; (3) To assist the pupil in retaining and increasing his fundamental skills; (4) To give the pupil an insight into the effects of mathematics upon civilization, industry, security, and science." Except for suggestions for classroom procedures and for projects for mathematics clubs, the bulletin is devoted to listing texts, standardized tests, equipment, films, and a bibliography for teachers.

"Since many difficulties are due to inability to acquire thought from the printed page, special techniques are suggested and practice exercises are provided in teaching pupils how to read," even at the temporary "expense of drill in techniques. . . ."

The author of the bulletin shows how mathematics can contribute to the fields of self-reliance, human relationships, economic sufficiency, and civic responsibility, and says that "its place in the curriculum is justified only when it does so." She quotes from the **Fifteenth Yearbook of the National Council of Teachers of Mathematics,** "Good will and a warm heart are not enough to furnish us with the protection of life insurance or a social security program; the formulas and tables of the actuary are in some ways more necessary. . . . The value of mathematics in the field of economic efficiency is axiomatic. . . . For vocational and consumer effectiveness it is fundamental. In an age in which science is the most significant factor the demand for young people with mathematical comprehension exceeds the supply." Opportunities to develop attitudes of social sensitivity "are present in units on home owning, mortgages, taxes, installment buying, insurance, investments, debts, risks, health, food, budgets, building and loan associations, and cooperative enterprises. Care should be taken that these topics are not divorced from their setting and hence their significance lost.

"Alaska schools have a special responsibility in the matter of basic training for technical trades because a large percentage of their graduates enter the fields of engineering and navigation." A similar statement appears in the secondary school science bulletin, which is further evidence of the policy of adapting the curriculum to known needs of pupils. This is also a cornerstone of the philosophy of federal school education.

" . . . Underestimation of the ability of the . . . boy and girl, and the slowness of mathematics teachers to revamp their courses in the light of modern needs, have resulted in . . . our *nationwide mathematical collapse.*

"In Alaska parallel courses for college preparation and non-college preparatory groups are not feasible because the schools are so small," hence dealing with individual differences depends upon the ingenuity of the teacher. It is suggested that teachers use "the differentiated or elastic assignment," that they "do not discourage the pupil . . . by thrusting down his throat the finer points of a logical proof if he cannot appreciate it," and states that "supervised study and individual instruction are helpful. . . ."

Social science

Bulletin No. 4, **Social Science For Alaska High Schools,** was ready for use in 1945.

"The course of study . . . is in broad outline form and has been developed with the idea of stimulating initiative.

"The traditional subjects of history, government, and economics, taught with emphasis upon mastery of facts, cannot develop the citizenship" needed in the world of today. "Action motivated by democratic attitudes and ideals is more essential than facts, information, and principles. . . . It is the duty of schools in our day to provide practical training for democratic living. . . . There is constant need for continuous revision of the social studies curriculum in order to keep pace with the ever changing problems that confront young people in preparing themselves to assume the responsibilities of mature citizens. . . . New methods of teaching are being tried daily and we can profit by both failures and successes if they are made known."

The bulletin refers Alaska teachers to Paul Hanna's **Youth Serves the Community** for suggestions about community service projects in which high school pupils may actually participate. It says that teachers are expected to "utilize their communities as a means of illustrating and making more concrete the problems that are studied." Recent Civil Service examinations for teachers in Indian schools carry this similar statement, " . . . Teachers are expected to find within the environment much of the material for their educational program."

The use of visual aids is advocated; "films, film strips, slides, flat pictures, maps, globes, charts, models, diagrams, specimens and exhibits" as well as the radio.

Every territorial high school is required to offer at least one semester of Alaska history. "There is no text book on Alaska history suitable for use in the secondary schools. . . . The course must be built up from many sources. . . . Alaska history . . . offers opportunity for teachers and pupils to make use of the community as a laboratory. . . . Alaska history should instill in the pupils a love for their territory without provincialism."

The teacher is urged to supplement the meager reference list in the bulletin "with newspaper and magazine articles, charts, maps and pictures. . . . An extensive study of the history of the local community" will make it clear that "each section has its own bits of folk lore, its historical sites, and its old timers "who helped make its history are still alive.

In federal schools it is sometimes desirable to make use of special subject matter of value to the local group, and teachers in these schools are encouraged—just as territorial school teachers are—to develop the necessary special teaching materials themselves with the cooperation of children and local adults.

Science

Bulletin No. 5, **Science for Alaska High Schools,** appeared in 1946 and was prepared in the Territorial Office of Education with suggestions and information from "a number of superintendents and high school principals and teachers." It should "stimulate . . . teachers . . . to develop a program adjusted to the needs of the pupils and the local community.

"The very essence of sound educational procedure is to be found in leading pupils into experiences; converting these experiences into factual knowledge; then using this knowledge in the thinking process, in reasoning through from a well established fact, or group of related facts, to an indisputable or related group of conclusions." The applicability of "this premise for sound educational procedure . . . is especially clear" in the field of science. Science aids pupils "to grow in ability to do critical thinking, free from bias and superstition.

"Science is the basis for personal and community health; it underlies civic and social process; it contributes to recreational and esthetic interests in life; and it enriches home membership."

Science should "provide experience which pupils will understand and which will aid in becoming continuously and properly adjusted to their environment. It helps pupils see science as man's servant in its proper relationship to man's social well-being," and to "understand and use the natural environment more effectively," and to "become more intelligent users of scientific goods and works."

Not all laboratory work calls for "factory-made equipment used in a room especially designed for that purpose. Indeed some of the most valuable investigations must be made outside the laboratory and in many situations pieces of apparatus constructed by pupils have greater educative value than expensive pieces which can be purchased. . . .

"Because health and biology are so closely related, and to avoid setting up an additional required course, the basic subject matter of health has been incorporated into the course of study in biology."

Chemistry and physics are offered as electives. The inclusion of physics is justified as a means of orienting pupils "in the scientific age in which they live," and because of the "contributions of physical science to human welfare and progress. . . . Chemistry . . . is the cornerstone of sanitation, medicine, engineering, agriculture and industry. . . . It provides a ready means of solving practical and theoretical problems of great importance to modern living.

Quotations chosen from the territorial documents generally coincide with points of view held by educational policy makers for federal schools. Some parts of the course of study for territorial schools express points of view with which we do not wholly sympathize. However, the length of these digests and the considerable number of quotations are both sufficient evidence that there are very large areas of agreement.

The differences between the philosophy, aims and procedures of territorial school education and those of federal schools for the natives of Alaska are far fewer than is generally believed to be the case. The differences which do exist are differences in degree rather than kind. Evidences which are often interpreted to represent differences are due to certain variations in the problems faced by the two school systems and to the fact that federal schools have been able to train their teachers in the art of turning philosophy and theory into practice in the daily routines of school life. Field supervision, carefully planned, summer schools for employees, plus other in-service teacher training procedures, have helped to develop an understanding of basic educational philosophy and have given practical help in solving teachers' problems. In organizing the details of local school curricula—a responsibility which territorial school teachers are urged to assume—teachers in federal schools have received personal assistance both as groups and as individuals.